G 190 3:1966/67 c.2

North Carolina State Library Raleigh

Da.

General Catalog 1966-1967



WAYNE TECHNICAL INSTITUTE

Goldsboro

Today.... A Technical Institute

Tomorrow....
Your Community College

MEMBER OF

American Association of Junior Colleges

American Technical Education Association

North Carolina Department of Community Colleges

Student Services Personnel Association

The Association of Occupational Curriculum Directors and Supervisors

ACCREDITED AND APPROVED BY

North Carolina State Board of Education

North Carolina Department of Community Colleges

North Carolina Department of Public Instruction

Division of Vocational Rehabilitation

Veterans Administration



WAYNE TECHNICAL INSTITUTE

General Catalog 1966-1967

906 Highway 70 East By-Pass

GOLDSBORO, N. C. 27530

Post Office Box 1259



1966

2 3 9 10 16 17 23 24 30 31 4 5 6 7 11 12 13 14 18 19 20 21 25 26 27 28

JULY TW M S 2 9 16 23 30 3 4 5 6 7 8 10 11 12 13 14 15 17 18 19 20 21 22 24 25 26 27 28 29 31

JANUARY S M T 1 2 3 8 9 10 15 16 17 22 23 24 29 30 31 W 4 5 6 7 11 12 13 14 18 19 20 21 25 26 27 28

1967

JULY								
S	Μ	Т	W	Т	F	S		
						1		
		4	5	6	7	8		
9	10	11	12	13	14	15		
16	17	18	19	20	21	22		
23	24	25	26	27	28	29		
30	31							

FEBRUARY							
S	M	T	W	T	F		
6 13 20 27	7 14 21 28	1 8 15 22	2 9 16 23	3 10 17 24	4 11 18 25		

	AUGUST							
S	M	Т	W	Т	F			
7 14 21 28	1 8 15 22 29	2 9 16 23 30	3 10 17 24 31	4 11 18 25	5 12 19 26			

	FEBRUARY									
S	M	Т	W	Т	F					
			1	2	3					
5	6	7	8	9	10					
12	13	14	15	16	17					
19	20	21	22	23	24					
26	27	28								

	AUGUST							
S	M	Т	W	Т	F			
		1	2	3	4			
6	7	8	9	10	11			
13	14	15	16	17	18			
20	21	22	23	24	25			
27	28	29	30	31				







	MARCH								
N	T	W	Т	F	S				
	1	2	3	4	5				
.7	8	9	10	11	12				
14	15	16	17	18	19				
21	22	23	24	25	26				
28	29	30	31						

	SEP	IFW	REK		
M	Т	W	Т	F	S
	6	14		16	3 10 17
	20 27			23 30	24

	MARCH							
M	T	W	Т	F	S			
6 13 20 27	7 14 21 28	1 8 15 22 29	2 9 16 23 30	3 10 17 24 31	4 11 18 25			

	SEPTEMBER							
M	Т	W	Т	F	S			
4 11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	2 9 16 23 30			

APRIL							
S	M	T	W	T	F	S	
					1	2	
		5 12					
17		19					
24		26			29		

OCTOBER							
S	M	T	W	T	F	S	
2 9 16 23 30	10 17	11 18	12 19	6 13 20 27	14 21	1 8 15 22 29	

		Α.	IPKI	L		
S	M	T	W	Т	F	S
2 9 16 23 30	3 10 17 24	18	12	13 20	14 21	

		OC	TOB	ER		
S	М	Т	W	T	F	S
8	2 9	10	11		13	
22	16 23 30					

		1	MAY			
S	M	T	W	Т	F	S
1 8 15 22 29	23	10 17	11	12	_	21

		NO/	∕EM	BER		
S	M	T	W	Т	F	S
6 13 20 27	7 14 21 28	1 8 15 22 29	2 9 16 23 30	3 10 17 24	4 11 18 25	5 12 19 26

S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31			- 1	MAI			
7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27	S	M	Т	W	Т	F	S
20 27 00 01		15 22	9 16 23	10 17 24	11	12 19	13 20

		NOI	/EM	BER		
S	M	Т	W	_ T	F	S
19	13 20	14	15	2 9 16 23 30	10 17	

		J	UNI	E		
S	M	Т	W	T	F	S
5 12 19 26	20	14	1 8 15 22 29	16	3 10 17 24	4 11 18 25

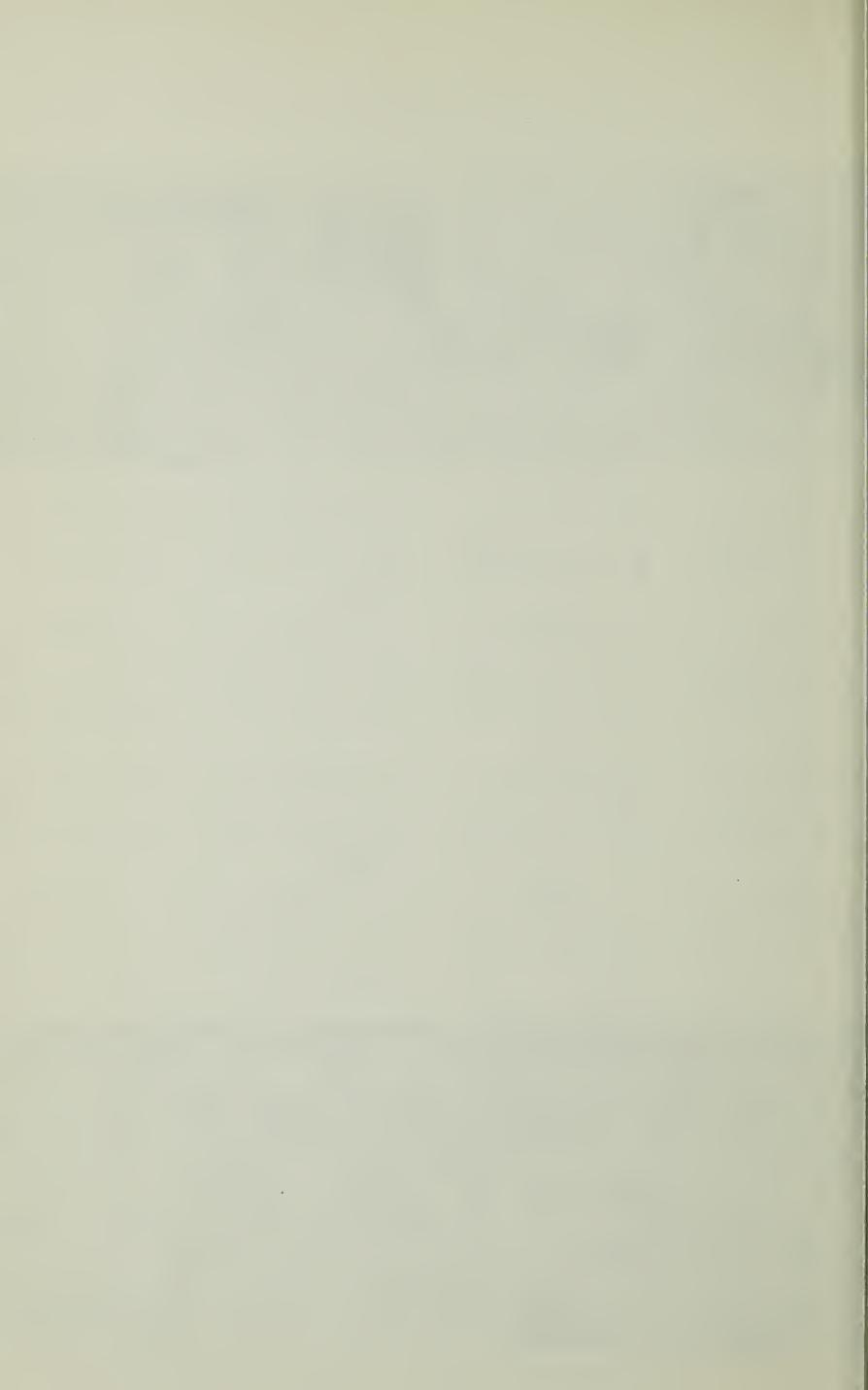
		DEC	CEM	BER		
S	M	Т	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

		J	UN	E		
S	M	T	W	Т	F	S
4 11 18 25	12 19		14 21	15 22	16 23	10 17

		DEC	EM	BER		
S	M	T	W	Т	F	S
3 10 17 24 31	4 11 18 25	5 12 19 26	6 13 20 27	7 14 21 28	1 8 15 22 29	2 9 16 23 30







CONTENTS

General Information 1	.5
Evening and Extension Classes	21
Admission 2	25
Expenses	28
Academic 3	:1
Curriculums:	
Accounting 3	4
Automotive Mechanics 3	
Business Administration	8
Dental Assisting 4	0
Dental Hygiene 4	2
Diesel Mechanics 4	4
Mechanical Drafting and Design 4	6
Electronics Engineering Technology 4	8
Electric Line Trade 5	0
Executive Secretary	
Forestry 5	
Livestock and Poultry	
Medical Secretary	
Practical Nursing	
Psychiatric Nurse's Aide	
Soil Conservation	
Tractor Mechanics	
Tractor Mechanics	Ü
Description of Courses:	
Agriculture 6	8
Air Conditioning and Heating 7	
Automotive 7	
Business 7	
Biology 8	
Chemistry 9	
Data Processing 99	
Dental 99	
Dental Public Health	
Diesel 99	
Drafting	
Economics	
Electricity	
Electronics	
English	
Forestry	
Industrial Science	
Mathematics	
Mechanics	

Nursing	11
Physics	12
Political Science	12
Power Mechanics	12
Psychiatric Nurse's Aide	12
Psychology	12
Social Science	12
Sociology	12
Welding	12
	4.0
equest for Information	

BOARD OF TRUSTEES

SAM HOCUTT, Chairman Goldsboro, N. C.

JOHN G. PEACOCK, Vice-Chairman Fremont, N. C.

H. B. Monroe, Ed.D., Secretary

MUNROE BEST Goldsboro, N. C.	J. S. STEWART Fremont, N. C.
CLAY BROWN DALE Seven Springs, N. C.	EARL WHITTED Goldsboro, N. C.
JAMES D. EVANS Goldsboro, N. C.	RALPH JINNETTE Goldsboro, N. C.
BEN H. HOUSTON, D.D.S. Goldsboro, N. C.	HAL TANNER Goldsboro, N. C.
SHELTON JORDAN Mt. Olive, N. C.	MRS. JOHN B. CHASE Eureka, N. C.

ADMINISTRATION

H. B. Monroe, Ed.D. President
W. TRAVIS MARTIN, Ed.D Dean of Instruction
HARRY J. ARCHER, M.Ed., Adv. Degree Dean of Students
CARL T. Cox Business Manager
JEFFERSON H. FAUCETTE Director, Division of General Adult Education
WALTER D. BROWN Director, Evening Program
LOUISE C. BULLOCK
SUSAN COLLINS
Patricia Garris
HENRY J. McGee Director, Carteret Technical Institute Unit of Wayne Technical Institute
DIXON S. HALL Director, James Sprunt Institute Unit of Wayne Technical Institute
James E. Vann Director, Sampson County Technical Institute, Unit of Wayne Technical Institute

OFFICE STAFF

CATHERINE THOMPSON	Bookkeepe
HARRIET WESSELL	Equipment Coordinator
ELIZABETH BEST	
SYLVIA LEE	Secretary
CAROLYN JERNIGAN	Secretary
MARJORIE SOUTHERLAND	Secretary
MEREDITH SOUTHERLAND	Secretary
CARMEL MARKLEY	Secretary
VICY WALTON	Secretary
MARY SMITH	Secretary

MAINTENANCE STAFF

H. E. HARDISON	Superintendent o	f Buildings an	nd Grounds
GEORGE HINES			Custodian
WILLIAM YELVERTON			Custodian
ETHEL YELVERTON			Custodian

FACULTY COMMITTEES

STUDENT AFFAIRS COMMITTEE

Harry J. Archer, Chairman Louise Bullock Jimmy Keyzer Frank Casey Georgianna Powell Kenneth Neal Reid Folsom Clarence Warren

RECRUITMENT COMMITTEE

Harry J. Archer, Chairman William Seibert Walter Brown Ralph Leach Earl Hardison Louise Bullock

FACULTY WELFARE COMMITTEE

Marie Johnson, Chairman
Reid Folsom
Earl Hardison
Allen Strom
Doris Ward
Mary Lynch
(Administration serves as
Ex-officio members)

CURRICULUM AND STANDARDS

W. Travis Martin, Chairman
Eleanor Powell
Walter Brown
William Seibert
Earl Hardison
Ralph Leach
Louise Bullock

FACULTY ADVISORY COMMITTEE

W. Travis Martin, Chairman William Seibert Ralph Leach Eleanor Powell Louise Bullock Walter Brown

REGISTRATION COMMITTEE

Harry J. Archer, Chairman James Edmundson Carl Cox Georgianna Powell Doris Ward Alyne Woodall

LIBRARY COMMITTEE

Pat Garris, Chairman
Earl Hardison
William Seibert
Lewis Jackson
Linwood Anderson
Mary Lynch
Doris Ward

GRADUATION COMMITTEE

Harry J. Archer, Chairman Susan Collins Shirley Whitley Ronald Spitler James Edmundson Jimmy Keyzer Janet Mize

RECREATION COMMITTEE

Reid Folsom, Chairman Kenneth Neal Earl Hardison Susan Collins Eleanor Powell Ronald Spitler Linwood Anderson

WAYNE TECHNICAL INSTITUTE SCHOOL CALENDAR

1966-1967

SUMMER QUARTER

June	7	Tuesday—Registration
June	8	Wednesday—Classes begin
June	15	Wednesday—Last day to register, change or add courses
July	4	Monday—Holiday
July	14	Thursday—Last day to withdraw from a course without receiving "F"
August	24	Wednesday—Examinations—Summer Quarter ends

AUTUMN QUARTER

Sept.	7	Wednesday—Registration	
Sept.	8	Thursday—Classes begin at 7:00 A.M.	
Sept.	15	Thursday—Last day to register, change or add courses	
Oct.	14	Friday—Last day to withdraw from a course without receiving "F"	
Nov.	23	Wednesday—Examinations—Autumn Quarter ends at 10:00 P.M.	

WINTER QUARTER

Nov.	29	Tuesday—Registration
Nov.	3 0	Wednesday—Classes begin at 7:00 A.M.
Dec.	16	Friday—Christmas Holidays begin at 10:00 P.M.
Jan.	2	Monday—Classes resume at 7:00 A.M.
Jan.	19	Thursday—Last day to withdraw from a course without receiving "F"
Feb.	2 8	Tuesday—Winter Quarter ends at 10:00 P.M.

SPRING QUARTER

Mar.	6	Monday—Registration
Mar.	7	Tuesday—Classes begin at 7:00 P.M.
Mar.	23	Thursday—Easter Holidays begin at 10:00 P.M.
Mar.	28	Tuesday—Classes resume at 2:00 A.M.
Apr.	14	Friday—Last day to withdraw from a course without receiving "F"
May	24	Wednesday—Spring Quarter ends at 10:00 P.M.

SUMMER QUARTER

June	6	Tuesday—Registration
June	7	Wednesday—Classes begin at 7:00 A.M.
July	3	Monday—Independence Holiday begins at 10:00 P.M.
July	5	Wednesday—Classes Resume at 7:00 A.M.
July	14	Friday—Last day to withdraw from a course without receiving "F"
August	23	Wednesday—Summer Quarter ends at 10:00 P.M.

FACULTY

INSTRUCTORS	INSTITUTIONS ATTENDED
Anderson, Linwood	East Carolina College
Archer, Harry J.	University of Richmond East Carolina College University of North Carolina
Berry, Charlotte	Forsyth School of Dental Hygiene East Carolina College
Boykin, Jeanne	Philadelphia General Hospital North Carolina State East Carolina College University of North Carolina
Brown, Walter D.	University of Maryland Air University Eastern New Mexico University East Carolina College Embry Riddle School of Aviation Stewart Technical School of Aeronautics

INSTRUCTORS

INSTITUTIONS ATTENDED

Bullock, Louise C.

New Jersey State School of Nursing

Peabody College

East Carolina College University of North Carolina

Casey, Frank

North Carolina State University

East Carolina College Atlantic Christian College

Collins, Susan

East Carolina College

Woman's College at University of North Carolina

Cox, Carl

Atlantic Christian College East Carolina College

Edmundson, James

North Carolina State University

Ellis, Dixie

Atlantic Christian College University of Colorado

Faucette, Jefferson H.

East Carolina College

Folsom, Reid

University of Florida Jacksonville University Stetson University Lake City Jr. College Duke University Auburn University

Florida State Forest Ranger School

Garris, Patricia

East Carolina College

Griffin, Georgiana

Woman's College

Greensboro & Atlantic Christian College

Griffith, Patricia

Erie School for Dental Assistants

Pennsylvania State

Hager, Marlene J.

Wayne State University

Hardison, H. E.

North Carolina State University General Motors Institute

Studebaker Accounting School

Sun Electrical School

Carter Corporation Service School

Hardison, Mary

Frederick Memorial Hospital University of North Carolina

Hayes, Ray

Amarillo College

Associated General Contractors

General Electric

Westinghouse Electric

Jackson, Lewis

Virginia Polytechnical Institute

INSTRUCTORS

INSTITUTIONS ATTENDED

Johnson, Dorothy

University of North Carolina

East Carolina College

North Carolina State University at Raleigh

Johnson, Marie

East Carolina College

Appalachian State Teachers College

Keyzer, James

North Carolina State University Wilson Technical Institute Volkswagen Service School Cummins Diesel School Sun Electrical School

Kromi, Edythe

North Texas State College

Leach, Ralph

North Carolina State University

Loudermilk, Helen

University of North Carolina North Carolina State University

East Carolina College

Lynch, Mary

University of Tennessee Peabody College North Carolina State

Martin, W. Travis

Duke University

North Carolina State University

East Carolina College

Medford, Jessie

North Carolina State University General Motors Service Institute Minneapolis Moline Service School

Ford Service School Allen Electrical School

Mize, Janet

University of North Carolina

Monroe, H. B.

University of New York Bucknell University Pennsylvania State College Colorado State College University of Missouri

Neal, Kenneth H.

East Carolina College

Phipps, Diane B.

University of Southwestern Louisiana

Porter, Lowry I.

East Carolina College Mercer University Atlantic Christian

University of Arkansas

South Eastern Baptist Theological Seminary

Powell, Eleanor B.

Brenau College University of North Carolina

Columbia University

INSTRUCTORS INSTITUTIONS ATTENDED

Powell, Georgiana Elizabeth Burton School of Nursing

North Carolina State East Carolina College

University of North Carolina

Remsburg, Virginia Agnes Scott College

University of Virginia Longwood College William and Mary

Seibert, William J. Western Kentucky State

Michigan State University East Carolina College

Zast caroma conego

Spence, Lyrl O. Woman's College at University of North Carolina

East Carolina College

New York School of Interior Design

Pratt Institute

Spitler, Ronald Virginia Polytechnical Institute

Stevens, William W. North Carolina State

Strohm, Allen P. Elon College

East Carolina College

Uzzell, Patricia East Carolina College

Guilford College

Vinson, Elizabeth Meredith College

Wake Forest College East Carolina College

Ward, Doris B. Meredith College

East Carolina College

Warren, Clarence Wake Forest College

North Carolina State University

Waters, Anne M. Mount Olive Junior College

Atlantic Christian College

Whitley, Shirley Peace Junior College

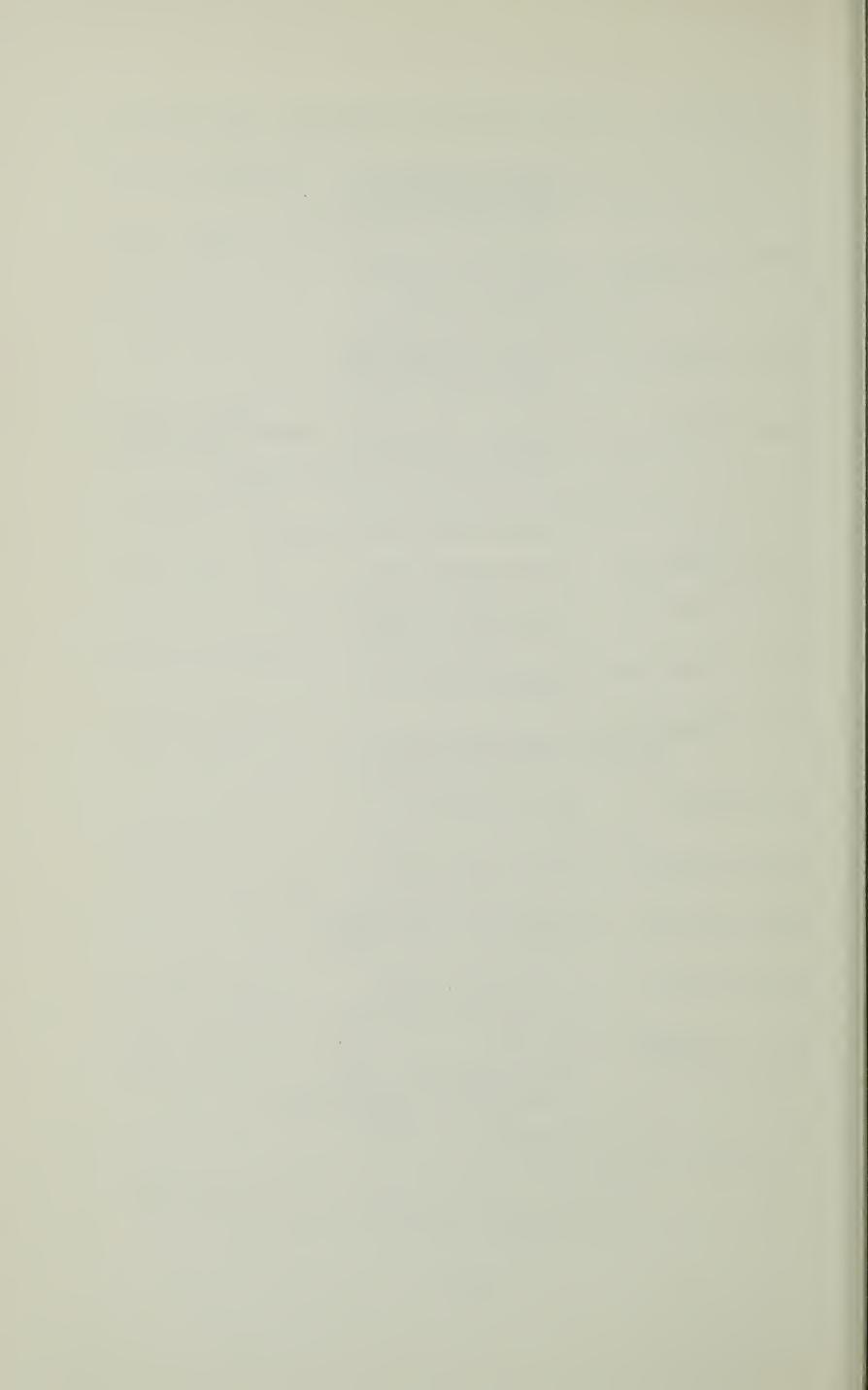
East Carolina College Atlantic Christian College

11 statistic Oni issuan Conege

Woodall, Alyne K. Lon Morris Junior College

Baylor University

North Carolina State University



GENERAL INFORMATION

LOCATION AND FACILITIES OF INSTITUTE

The Wayne Technical Institute is located in modern buildings on highway #70 East Bypass, between the William Street Exit and the Snow Hill Intersection.

The Institute is equipped with the latest and most modern equipment, containing in excess of 40,000 square feet. The entire facility is heated and, where practical, laboratories and class-rooms are air conditioned.

The entire campus consists of approximately 45 acres of open and wooded land.

Counseling Service

Wayne Technical Institute maintains a counseling and testing service not only for the convenience of those students enrolled in the Institute's programs, but for persons seeking assistance in making a wise and responsible vocational choice. All Guidance Services are available without charge.

Student Publications

The Greenbriar is the college annual. Its purpose is threefold:

- 1. To provide a lasting record and history of the Institute's growth and development.
- 2. To create and stimulate interests and initiative within the student body.
- 3. To provide memories of bygone days.

It is published by the students each regular school year.

Placement Service

Wayne Technical Institute operates the Placement Service to coordinate and direct activities concerned with assistance to graduates in the solution of their problems in connection with post-school employment. The principal function of the office is to serve as an intermediary agency between the student and prospective employers. Of greatest importance is the assembling of permanent records on each student which include academic information, work experiences, person references, and other pertinent data which will aid prospective employers in considering students for particular positions. Persons who desire the assistance of this office in matters of placement are invited to contact Dean of Students, Wayne Technical Institute.

Living Accommodations

ALL correspondence regarding housing should be addressed to the Dean of Students, Wayne Technical Institute. (Refer to Student Housing listed under Expenses.)

Food Services

Supplementary meals and light refreshments may be had at the Snack Bar, located in the student lounge area of the main building.

Motor Vehicles

Motor vehicle regulations of the school apply to any vehicle which requires a state license. All vehicles must be registered in the Dean of Students office and willful failure to register a motor vehicle subjects the student to suspension from class.

Student Government

The Student Government was organized during the Fall Quarter of 1963. Elections were held on October 22nd, 1963. Its constitution was written and adopted soon after the first officers were installed. The purpose of this organization is to promote in each student a personal sense of pride and responsibility for his or her school, Country and, to accept his democratic responsibilities as an American citizen.

The Student Council acts as an intermediary between the student body and the Administration of the school, serving to crystalize student opinion and to present that opinion for the consideration of the authorities. It likewise cooperates with the administration in the coordination and supervision of student activities.

Enrollment

The Wayne Technical Institute has made rapid strides on enrollment each quarter since it was founded. It is expected that this steady pattern of growth will continue in the future.

Bookstore-Snackbar

The Wayne Technical Institute maintains, for the convenience of the student body, a combination bookstore and soda shop. Students are able to purchase needed text books, supplies and equipment. Refreshments, as well as food (milk, coffee, sandwiches, and soup) are available to the students. The Bookstore-Snackbar operates from 7:30 A.M. till 4:00 P.M.; 6:45 P.M. till

9:00 P.M. each day, Monday through Friday each Quarter during the regularly scheduled classes. When possible, the Institute assists students in off-setting some of their expenses by offering them employment in the Student Store or other departments in the Institute.

FOR INFORMATION

Prospective students should address letters requesting the catalogue, brochures, application blanks, and scholarship and loan information to the Dean of Students, Wayne Technical Institute, Goldsboro, North Carolina.

EXTENSION CENTERS

The Wayne Technical Institute administers Extension Centers in the following locations:

★ James Sprunt Institute
Kenansville, North Carolina

Accounting

Auto Body Repair

Automotive Mechanics

Business Administration

Commercial Art and Design

Cosmetology

Engraving Graphics

Executive Secretary

Masonry

Practical Nursing

Radio & T. V. Repair

Welding

★ Carteret County Industrial Education Center Morehead City, North Carolina

Business Administration

Drafting

Electronics (Radio & T.V. Repair)

Executive Secretary

Marine Engines (Diesel and Gasoline)

Marine Welding

Practical Nursing

Welding

- ★ Johnston County Extension Unit High School Program for Adults
- ★ Sampson County Technical Institute Clinton, North Carolina

Accounting

Business Administration

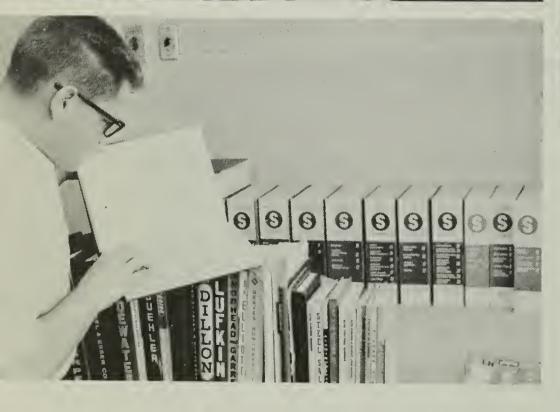
Executive Secretary

Secretarial Science

High School Program for Adults













LIBRARY

The Library operates in its new spacious, well-lighted quarters which features a reading lounge area and a seating capacity of 100 readers. The book collection, which is primarily scientific and technical, consists of approximately 7,000 volumes. New books are being added continually. Among these are biographies and historical novels. The reference collection contains 5 sets of encyclopedias and more than 130 specialized dictionaries and handbooks. In addition to the book collection are a large number of periodicals and five newspapers, three of which are national. The Library is also the audio-visual center of the school. Included are a variety of projection equipment and a fast growing collection of films, filmstrips, and slides. There is available a good selection of other materials, such as pamphlets and clippings.

The Library is open from 8:00 A.M. to 10:00 P.M. daily. Student library assistants and a full-time librarian are on hand to assist students with special problems.

CONDUCT AND STANDARDS

Wayne Technical Institute has a genuine concern for the integrity of all students enrolled. Students are required to conduct themselves in a mature and responsible manner.

The following rules apply to all students who are enrolled in this institution:

- 1. Each student is held responsible for information published through notices and announcements placed on bulletin boards.
- 2. Students who negligently lose, damage, destroy, sell, or otherwise dispose of school property placed in their possession or entrusted to them will be charged for the full extent of the damage or loss and are subject to disciplinary action.
- 3. Under no condition will alcoholic beverages or narcotics be permitted in or on the school property. No one under the influence of alcohol or narcotics will be allowed on school premises. Any violation of this regulation will result in expulsion from the Institute on the first offense.
- 4. Students who engage in such acts as stealing, gambling, profane language, personal combat, and possession of firearms and dangerous weapons are liable to disciplinary action.
- 5. Smoking is prohibited in all classrooms, laboratories and shops at all times.
- 6. Students are expected to make use of the disposal containers in the halls, shops and classrooms when discarding materials.
- 7. Students are expected to dress appropriately for all occasions.
- 8. Due to the amount of danger areas in the Institute, students are asked not to bring children to class with them.
- 9. Students are to enter the office on business only.
- 10. Students must remember that when entering and leaving the school parking areas that they must always proceed with caution.
- 11. Drinking of soft drinks, milk shakes and coffee; eating of food, is allowed only in designated areas. Drinks and food should be kept within the limits of the student lounge or out of doors.
- 12. Parking is allowed only in designated areas. (Parking spaces only). Faculty and staff parking is marked.
- 13. All student vehicles must be registered in the Dean of Students office.

EVENING AND EXTENSION CLASSES

GENERAL INFORMATION:

Wayne Technical Institute can offer a diversity of classes other than those courses offered in its regular curricula. Not only are courses offered at the Institute, but for groups in their own community. Because of the flexibility of Wayne Technical Institute's organization and its variety of courses, individuals of post-high school age, irrespective of their background, training, and experience, are welcomed and encouraged to participate in these classes. Wayne Tech's aims include the extension of opportunities for improved living and the good life.

Through the Evening and Extension Classes, the Institute is able to extend its services to the adults of the community and promote the following:

Cultural Activities
Supervisory Development Instruction
Firemanship Instruction
Law Enforcement Instruction
Adult High School Education
Technical Education
Trade Education
Industry Training
Literacy Education
Avocational Instruction

Through Extension, Wayne Tech offers courses away from the main campus. The above services are extended to communities not only in all areas of Wayne County, but other counties as well.

REGISTRATION

Registration will be conducted on the first night of class. Anyone wishing to register for a class at the Institute after the first class meeting will register at the office. However, registration will be accepted anytime during the class.

TUITION

The tuition for evening and extension courses is nominal, ranging from \$2.00 to \$5.00 per course. Tuition will be paid to the Institute on the first night of class. The tuition does not include the cost of textbooks, manuals, special tools, or instruments if needed in a course.

SCHEDULE

The majority of these courses are offered one or two evenings each week between the hours of 7:00 and 10:00 p.m., Monday through Friday.

However, classes are not limited to these hours or days. Special days and hours can be arranged to suit the special needs of the individuals served.

CERTIFICATE OF ATTENDANCE

A student successfully completing such a course will be awarded a certificate of attendance from the Institute.

EVENING AND EXTENSION CATALOG

A catalog describing the Evening and Extension Courses is published each quarter. A copy of this catalog may be obtained by contacting the Director of General Adult Education, P. O. Box 1259, Goldsboro, North Carolina.

SERVICES

Bookstore and Student Center

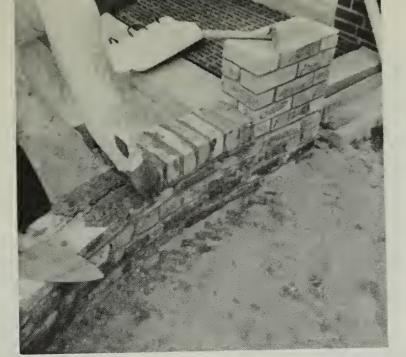
The bookstore and student snack area, located at the Institute, is open Monday through Friday from 7:00 p.m. to 9:00 p.m. for the convenience of the students. This area is open during the day from 7:50 a.m. to 7:00 p.m.

Library

The Institute Library is open from 8:00 a.m. to 10:00 p.m. every day, Monday through Friday.

CHANGES

The information in this catalog is subject to change.



Brick Masonry



Oxyacetylene Welding



Using the Craig Reader, a new development in improving reading speed.



Lapidary Arts



Learning Laboratory



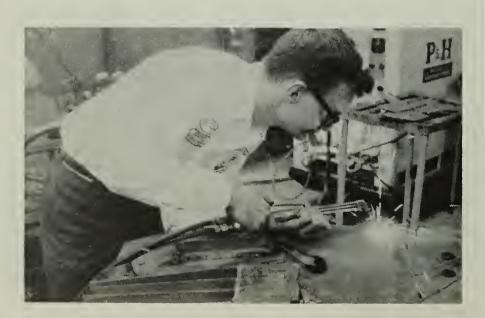
Flower Arranging



Oil Painting



Electronics







Care and maintenance of horses' feet

Acetylene Welding

ADMISSION

GENERAL QUALIFICATIONS

The applicant should be a high school graduate or be able to demonstrate experience and mental growth equivalent to that of a high school graduate. Satisfactory scores on the Aptitude Test Battery administered by the Institution will be required and an earnest desire to enter the chosen field of study must be exhibited. Note: Students interested in Health Occupation Programs will be required a personal interview.

PRE-TECH

The success of students entering a technical field of study is, in a large part, determined by the basic skills and knowledge these students have acquired prior to enrollment.

Wayne Technical Institute has a versatile Pre-Tech Program designed to provide each student the opportunity to gain the basic skills needed to increase his chance of success in a particular program of study.

Each student is tested prior to enrollment and careful consideration is given to his test scores and previous academic record to determine which part, if any, of the Pre-Tech Program would be beneficial to him.

The Pre-Tech Program is versatile and easily adapted to meet the particular needs of each student.

REGISTRATION

Applicants seeking membership in Wayne Technical Institute, having been accepted for admission by the Dean of Students, should present themselves to the school for matriculation, on the date specified in the Announcements of the School. Any student who fails to present himself at the time specified for registration may be charged a delayed registration fee.

WHEN TO ENROLL

Students desiring to enter may enroll in the Fall, Winter, Spring or Summer Quarters. These dates are listed under ACA-DEMIC CALENDAR in the front of this catalogue.

APPLICATIONS

Unless otherwise specified, admissions to all curricula are under the jurisdiction of the Dean of Students, from whose office

application forms may be secured. Applications should be submitted to the above office in advance of the beginning date of the Quarter in which the applicants desire to enroll.

PROVISIONAL STUDENTS

Students applying too late to take the required pre-entrance examinations may be given a brief test and if the results appear satisfactory, the applicant will be permitted to enter the Institute as a Provisional Student. A Provisional Student will be required to complete the Pre-entrance examination and submit all required transcripts as soon as possible. In other words, he is admitted in good standing, provided examination scores, transcripts, and other information prove satisfactory.

SPECIAL STUDENTS

Those students with particular needs or problems will be given all possible assistance the Institute can render. Those students desiring to attend the Institute under this classification should set up an appointment with the Dean of Students. Individual programs of study will be worked out if both the Dean's Office and the interested party feel that participation would prove beneficial. This program does not lead toward a degree or diploma.

DIPLOMA

A diploma is awarded a student who completes an Institute diploma program with a general grade average of "C" or better in his major field of study and who has at least two quality points for each Quarter Hour of Credit earned in his total program.

DEGREE

On January 9, 1964, the North Carolina State Board of Education licensed the Board of Trustees of the Wayne Technical Institute to award the Associate of Applied Science Degree in those curriculums already approved by the State Board of Education and offered by the Institution. The Associate of Applied Science Degree is a two year college degree. A degree is awarded to a student who completes an Institute degree program with a general grade average of "C" or better in his major field of study and who has at least two quality points for each Quarter Hour of Credit earned in his total program.

TRANSCRIPTS

Students applying for admission will submit copies of their transcript along with their applications or shortly thereafter.

A transcript from each institution previously attended must be forwarded to the Dean of Students.

TRANSFER OF CREDITS

Quarter hours of credit earned at the Wayne Technical Institute can be transferred to any of the Institutions under the Department of Community Colleges in North Carolina. Transfer of credits to institutions other than North Carolina's System of Community Colleges would be determined by the institution to which the student wished to transfer. Grades transferred between Institutions of the Department of Community Colleges would be accepted as recorded.

Students who have not taken a course at the Institute but wish to receive credit by examination may do so provided the respective Department Chairman approves, and a satisfactory score on the examination is made. Students who receive credit by examination will receive a grade of "C" for the course.

EXPENSES

TUITION PER QUARTER

Tuition	\$30.00
Activity Fee	3.00

TOTAL \$33.00

Tuition for students taking less than 15 quarter hours of credit will be two dollars per quarter hour of credit. Time payments may be arranged at the business office.

REGISTRATION FEE:

A two dollar registration fee is to be paid once each school year.

OUT OF STATE STUDENTS:

Any student whose legal residence is outside of the State of North Carolina or, in the case of younger students who are boarding or living with relatives in the community, whose parents or guardians live outside of the State, will pay registration and tuition fees two-and-a-half times the in-State rate.

TEXTBOOKS:

Students are required to purchase their textbooks. For their convenience, the Institute maintains a bookstore in which books, uniforms and other required items, necessary to a program of study, may be purchased by the student. The cost of these items varies according to the program the student elects to pursue.

REFUNDS:

All accounts paid in advance are subject to refund on a prorated basis.

Federal-State Aid Programs:

The institution has and maintains the following policy for the refund of the unused portion of tuition, fees, and other charges in the event the student fails to enter the course or withdraws or is discontinued therefrom at any time prior to completion. The amount charged the student for tuition, fees and other charges for a portion of the course will not exceed the approximate pro rata portion of the tuition, fees, and other charges that the length of the completed portion of the course bears to its total length.

All Others:

The refund policy shall permit a refund of two-thirds of the tuition when withdrawal occurs before the end of 20 school days (the first school month) of the term. Time payments of one-third down and a third at the first of the next two months may be arranged at the discretion of the Business Office.

LATE REGISTRATION:

A student registering later than the date designated as registration day, must pay an additional fee of one dollar.

CREDIT FOR WORK COMPLETED:

No degree, diploma or certificate will be granted, or a transcript of credits furnished a student until all financial obligations to the Institute, other than student loans, have been paid. Transcripts will not be issued to persons not meeting due payments on student loans.

All previously incurred expenses and accounts at the Institute must be fully paid before a student may re-enter at the beginning of any quarter.

SCHOLARSHIPS:

Scholarship aid is available to worthy students from several sources. The School is endeavoring to provide other aid as it can be found.

FINANCIAL ASSISTANCE:

The Wayne Technical Institute program of financial assistance to students is administered by the Dean of Students. General inquiries about financial assistance should be addressed to Dean of Students, Wayne Technical Institute. Three types of financial aid—scholarships, loans, and student employment— are available to students who cannot otherwise meet the costs of a college education. One or more of these types may be used in assisting each approved applicant. Although the school cannot guarantee

all necessary assistance to every applicant, more than one-fourth of our student body currently receives some form of financial aid.

REHABILITATION:

The Wayne Technical Institute has students enrolled in full-time curriculums, who are liberally helped by the North Carolina Department of Public Instruction, Division of Vocational Rehabilitation.

The Federal Government offers a similar program of rehabilitation for veterans and war orphans.

VETERANS AND WAR ORPHANS:

Wayne Technical Institute is an approved Veterans Administration Institution sanctioned to offer programs of study to eligible Veterans' and War Orphans' under Chapter 35, Title 38, United States Code.

Eligible persons should contact their Local Veterans Administration Office or Veterans Administration Regional Office, Atlanta, Georgia.

STUDENT HOUSING:

Although the Institute does not have dormitory facilities, a list of persons interested in renting rooms or apartments to Institute students, is available. A current list of Goldsboro residents offering these facilities may be obtained from the Dean of Students upon request. Cost will vary, but will range between \$20.00 to \$40.00 per month, according to the livability and convenience. The Guidance Staff will assist interested students in locating adequate housing.

ACADEMIC

QUARTER SYSTEM

The Wayne Technical Institute operates on the Quarter Plan. The Fall, Winter, Spring, and Summer Quarters are each approximately eleven weeks in length. The Institute is in session five days a week.

CREDIT

Quarter hours of credit are awarded as follows: one quarter hour of credit for each hour per week of class work, one quarter hour of credit for each two hours per week of laboratory work, and one quarter hour for each three hours of shop practice per week.

Quarter hours of credit earned at the Wayne Technical Institute can be transferred to any of the institutions under the North Carolina Department of Community Colleges.

SCHOLARSHIP

A quality point system is used to calculate all student scholar-ship standings. The grades A, B, C, D, F, and I are used by this Institute; A is the highest grade given, D is the lowest passing grade, and F is a failing grade. A grade of "I" must be removed during the next quarter the student is enrolled in the Institute or it becomes a failure automatically. If the student does not return to school the "I" must be removed within one year or it automatically becomes an "F". An "F" may not be removed by repeating the course.

EXPLANATION OF GRADES

A—Excellent, (93-100); B—good, (85-92); C—average, (78-84); D—barely passed, (70-77); F—failed, course must be repeated to secure credit; P—passed; I—condition.

In terms of quality points, a grade of A earns 4 quality points per quarter hour; the grade B earns 3 quality points per quarter hour; and the grade C earns 2 quality points per quarter hour. The grade of D earns 1 quality point per quarter hour. After the close of each quarter, term reports of all students in all their studies are sent to parents or guardians.

HONOR ROLL

The Honor Roll is composed of students who make at least three (3) quality points per credit hour on all work taken with no grade below C.

DEAN'S LIST

The Dean's List is composed of students who are enrolled in a minimum of twelve (12) quarter hours of credit and have no grade below A on all work taken.

ABSENCES

The Institute operates under the general principle that class attendance is necessary. The following criteria govern all class absences:

- A. One (1) excused absence given per quarter hour credit for each course taken.
 - (Example: 3 hour course—3 cuts per quarter)
- B. Absences over allowed maximum must be either relative to sickness or death in immediate family. If sickness, an excuse signed by a medical doctor must be presented within one (1) week to the Dean of Students.
 - ***If the absences normally allowed for any course are used for indescriminate reasons, absences incurred for sickness will not be excused. Students are advised to save their cuts for unforseen reasons.
- C. One (1) quality point will be deducted for each unexcused absence beyond the allowed number of cuts.
- D. The seventy-five percent attendance requirement will remain in force for course credit.
- E. Absences incurred due to late registration or due to change in curriculum will count as cuts. If more class sessions are missed than allowable cuts given, they shall be recorded as overcuts.
- F. Special circumstances not covered in the criteria may be discussed with the Dean of Students.
- G. It is strongly emphasized that it is the responsibility of the student to clear anticipated needs to be away from class with his instructor as to whether work missed will be made up.

REQUIREMENTS FOR GRADUATION

A student must have a general grade average of C or better in his field of study and must have at least two (2) quality points for each quarter hour of credit earned in his total program in order to graduate and receive a diploma or degree. Presence at graduating exercises is a requirement, for prospective diploma or degree recipients except when permission for absentia has been granted by the Dean of Students. A written request for such a permission must be made at least ten (10) days before commencement.

WITHDRAWALS

Students desiring to leave the Institute during the quarter must withdraw officially through the office. This can be done with an official withdrawal slip obtained from the Dean of Students. There is no penalty if a student withdraws prior to the date specified in the Institute Calendar as the last date for withdrawing without failure. Failures are recorded on all courses for students who withdraw after that date. However, if a student withdraws after the deadline with the approval of a physician, a grade of WP or WF will be recorded on each course. Students who withdraw without following the above procedures will receive failing grades on all courses for which they are registered.

CREDITS FOR PREVIOUS TRAINING

Educational work completed by the student in other accredited schools may, where applicable, be accredited toward the requirements of an Institute Diploma or Degree Program. Students are expected to file transcript of all previous work. A minimum of two quarters of residence is required for graduation.

PROGRESS AND COURSE SELECTION

No student will be permitted to major in more than one curriculum at a time.

An evaluation of the progress of the student will be made each quarter; and if work is found to be unsatisfactory, the student will be called in for counseling. After consultation with the counselor, another quarter for improvement may be granted, or the student may be advised to change to a course more agreeable to his ability and background.

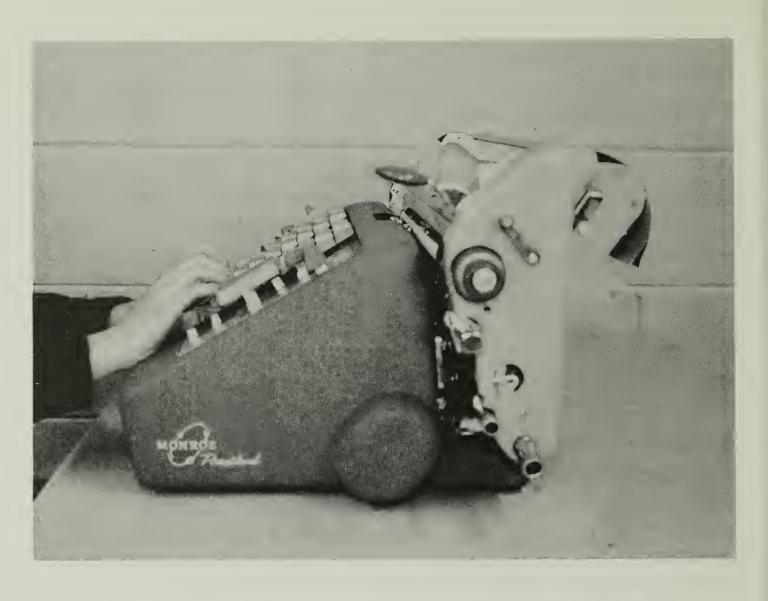
Any student who desires to change his program of studies should first discuss it with the Department Chairman, and with the Dean of Students.

ACCREDITATION

Wayne Technical Institute is accredited and approved by the Department of Community Colleges and North Carolina State Board of Education.

REGISTRATION

All students are required to register at the beginning of each quarter they are in attendance.



ACCOUNTING

KENNETH H. NEAL, Chairman Department of Business

Accounting is one of the fastest growing employment fields in America today, and the job outlook for good accountants seems bright for many years to come. These opportunities result from the tremendous business and industrial expansion in all parts of the country. Because of this emphasis, there is a growing need for trained people in the area of accounting to help managers keep track of a firm's operations. The Accounting Curriculum is designed to fill this need by offering students the necessary accounting theories and skills for the entry into the accounting profession.

The duties and responsibilities of an accountant vary somewhat in different firms. Some of the things an accountant might do are: record transactions, render periodic reports, maintain cost records, make special reports, complete tax returns, audit the books, and advise management in areas of financial affairs.

The graduate of the Accounting Curriculum may qualify for various jobs in business and industry leading to any of the following accounting positions: Accounting clerk, payroll clerk, accounting machine operator, auditor, and cost accountant. This training plus further experience should prepare them to become office managers, accounting supervisors, and to fill other responsible positions in a business firm.

ACCOUNTING

Cour	se Title	Quarter Hours Credit
FIRST QUARTE	R	
T-ENG 101 T-BUS 102 T-MAT 110 T-BUS 101 T-ECO 102	Grammar Typewriting (Or Elective)* Business Mathematic Introduction to Business Economics	3 5
CECOND OILABI		19
SECOND QUART		
T-ENG 102 T-BUS 120 T-ECO 104 T-BUS 115 T-BUS 123	Composition Accounting Economics Business Law Business Finance	6 3
THIRD QUARTE	R	
T-ENG 103 T-BUS 124 T-BUS 110 T-BUS 121 T-BUS 116	Report Writing Business Finance Office Machines Accounting Business Law	3 6
		18
FOURTH QUAR		
T-ENG 204 T-EDP 104 T-BUS 222	Oral Communication Introduction to Data Processing Systems Accounting Elective *	6
		19
FIFTH QUARTE	R	
T-ENG 206	Business Communication Social Science Elective	
T-BUS 223 T-BUS 225 T-BUS 235	Accounting Cost Accounting Business Management	6 4
		1.9
SIXTH QUARTE	R	
T-BUS 229 T-BUS 269	Social Science Elective Taxes Auditing Elective *	4

^{*} Elective courses must be selected from an associate degree curriculum.



AUTOMOTIVE MECHANICS

H. Earl Hardison, Chairman
Department of Power Mechanics

This curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair or adjust automotive vehicles. Manual skills are developed in practical shop work. Thorough understanding of the operating principles involved in the modern automobile comes in class assignments, discussion, and shop practice.

Complexity in automotive vehicles increases each year because of scientific discovery and new engineering. These changes are reflected not only in passenger vehicles, but also in trucks, buses and a variety of gasoline-powered equipment. This curriculum provides a basis for the student to compare and adapt to new techniques for servicing and repair as vehicles are changed year by year.

Automobile mechanics maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities and rural areas they also may service tractors or marine engines and other gasoline-powered equipment. Mechanics inspect and test to determine the causes of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition. They use shop manuals and other technical publications.

AUTOMOTIVE MECHANICS

	Course	e Title	Hours Credit
FIRST Q	UARTER		
PME MAT ENG PHY	1101 1101 1101 1101	Internal Combustion Engines Fundamentals of Mathematics Reading Improvement Applied Science	5 2
SECOND	QUARTE	R	
PME ENG DFT PHY	1102 1102 1101 1102	Engine Electrical and Fuel Systems Communication Skills Schematics and Diagrams: Power Mechanics Applied Science	3 1
THIRD Q	UARTER		
AUT AUT PSY AHR WLD	1123 1121 1101 1101 1101	Automotive Chassis and Suspensions Systems Braking Systems Human Relations Automotive Air Conditioning Basic Gas Welding	4 3 3
FOURTH	QUARTI	ER	
AUT AUT BUS	1124 1125 1103	Automotive Power Train Systems Automotive Servicing Small Business Operations	6



BUSINESS ADMINISTRATION

KENNETH H. NEAL, Chairman Department of Business

Since 1957 more than half of the employed people in the United States have engaged in distributing goods or rendering services. Leading manufacturers recently stated "... our major problem is in marketing ..." This means that major opportunities exist in fields of marketing and distribution. Young people who are educationally and personally qualified can achieve great satisfaction and financial rewards through careers in distribution and marketing.

In North Carolina the opportunities in business are especially bright. The population of the State is becoming increasingly urban and much more differentiating in its demands for goods and services. With the increasing industrial development in this State, it becomes essential to market our products more effectively. In many instances business has become increasingly competitive, much more highly organized and automated. This situation limits the better opportunities in business to those with specialized education beyond the high school level.

The graduate of the Business Administration program may enter Distribution and Marketing in a variety of career opportunities from beginning salesperson or office clerk to owner and manager in many areas such as advertising; banking; credit; finance; retailing; wholesaling; hotel, tourist and travel industry; insurance; selling—retail, wholesale, industrial and specialty; transportation; and communications.

BUSINESS ADMINISTRATION

	Cours	se Title	Quarter Hours Credit
FIRST QU	ARTER		
T-ENG T-BUS T-MAT T-BUS T-ECO	101 102 110 101 102	Grammar Typewriting (or Elective) * Business Mathematics Introduction to Business Economics	3 5
SECOND	QUART	ER	
T-ENG T-BUS T-ECO T-BUS T-BUS	102 120 104 115 123	Composition Accounting Economics Business Law Business Finance	6 3
THIRD Q	UARTE	R	
T-ENG T-BUS T-BUS T-BUS T-BUS	103 124 110 121 116	Report Writing Business Finance Office Machines Accounting Business Law	3 6
FOURTH	QUART	ER	
T-ENG T-BUS T-EDP T-BUS	204 232 104 239	Oral Communication Sales Development Introduction to Data Processing Systems Marketing Elective*	3 4 5
FIFTH QU	UARTEI	R	
T-ENG	206	Business Communication	
T-BUS T-BUS	243 235	Advertising Business Management Elective*	4
SIXTH Q	UARTE	${f R}$	10
T-BUS T-BUS T-BUS	229 272 271	Social Science Elective Taxes Principles of Supervision Office Management Elective*	4 3 3
* 1731 · ·			10

^{*} Elective courses must be selected from an associate degree curriculum.



DENTAL ASSISTING

Louise C. Bullock, *Chairman*Department of Health Occupations

In former years the dentist was taught to work alone; and if any assistance was utilized, it was in the capacity of an untrained person to clean up and perhaps answer the telephone. During the past several years, a quiet revolution has been occurring in dental offices all over the country.

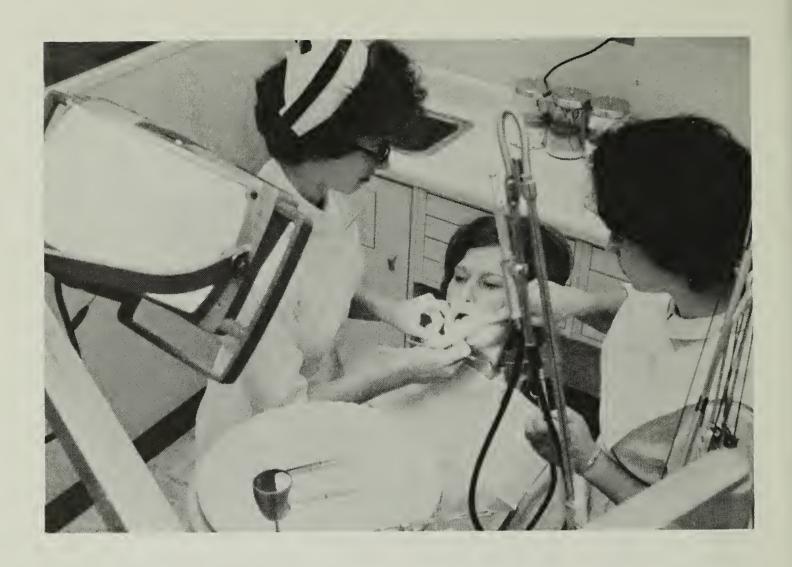
Because of increasing population and a higher educational level of the general population, the demand for dental services has increased tremendously. In order to keep up with increasing demands for service, the dental profession has come to rely on auxiliary personnel to do those things in a dental office which do not require the training and skill of the dentist. Consequently, the dental assistant is no longer used only for menial tasks; but with adequate training she is taking her place on the dental health team as an indispensable and valuable ally to the dental profession.

The dental assistant is now being trained to assume positions of high responsibility and is being used increasingly in the capacities of office manager and chairside surgical assistant.

At Wayne Technical Institute, one will have the opportunity to train in a modern, well-equipped school designed especially for training the dental assistant. The dental assistant trainee works directly under the supervision of several certified dental assistant teachers and a number of dentists from the local area. Each member of the administration and teaching staff has been certified by the Division of Professional Services, State Department of Public Instruction. The program includes comprehensive training in all areas of dental assisting, including office management, patient education, secretarial procedures, office laboratory procedures, and chairside surgical assisting.

DENTAL ASSISTANT

	Course	Title Guarter Hours Credit
FIRST	QUARTER	
DEN DEN DEN ENG BUS	1001 1002 1003 1101 1102	Introduction 2 Dental Materials 5 Preclinical Sciences I 4 Reading Improvement 2 Typewriting 3
SECON	D QUARTE	R
DEN DEN DEN ENG	1004 1005 1006 1102	Preclinical Science II 4 Dental Accounting 4 Clinical Procedures I 8 Communication Skills 3
THIRD	QUARTER	
DEN DEN DEN ENG	1007 1008 1009 1103	Clinical Procedures II 7 Dental Office Management 5 Dental Office Practice I 4 Report Writing 2
FOURT	TH QUARTE	ER CONTRACTOR OF THE PROPERTY
DEN DEN PSY	1010 1011 1101	Dental Office Practice II7Dental Assistant Seminar1Human Relations3
		11



DENTAL HYGIENE

Louise C. Bullock, *Chairman*Department of Health Occupations

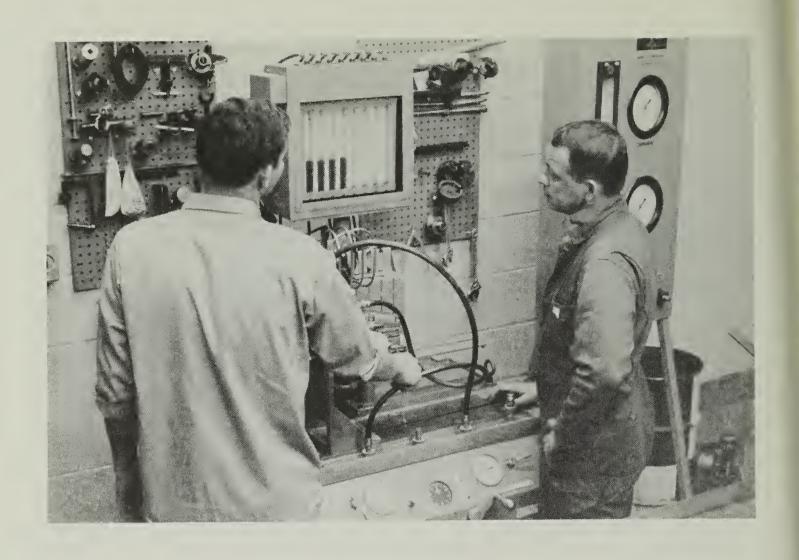
Dental hygiene has now taken an important place among the health professions. The number of women being educated as dental hygienists has grown steadily. At the same time there has been an increased demand for their skilled services by members of the dental profession. Many career opportunities in the field of dental hygiene are open to those women who are interested in serving people and in working with members of the dental profession to provide dental health care for the public. Those who choose a career in dental hygiene will become valuable members of the dental health team and contribute materially to sustaining the oral health of the nation.

The curriculum will be six quarters or two academic years in length. Upon satisfactory completion of this curriculum, the graduate will be awarded an Associate of Arts Degree in Dental Hygiene.

There is a great demand for the services of the dental hygienist, both by the public and the dentists.

DENTAL HYGIENE CURRICULUM

C .	·T		Hours
Course 1	Number	FIRST QUARTER	Credit
T-ENG T-CHM T-DEN T-BIO T-DEN T-DEN T-BUS	101 120G 125G 130G 127G 129G 102	Grammar Dental Chemistry First Aid Biology (General) Dental Hygiene and Ethics Dental Anatomy *Typewriting	5 2 4 2
		SECOND QUARTER	21
T-ENG T-CHM T-BIO T-BIO T-DEN T-DEN	102 125G 140G 145G 131G 133G	Composition Bio-Chemistry Anatomy and Physiology Histology and Embryology Dental Office Practice and Dental Materials Dental Anatomy	4 3 3
			$\frac{}{20}$
T-ENG T-BIO T-DEN T-DPH T-DEN T-BIO	103 150G 135G 140G 137G 240G	THIRD QUARTER Report Writing Microbiology Dental Manikin Practice Hygiene Radiology Anatomy and Physiology	5 5 2
			$\frac{-}{21}$
T-SSC T-DEN T-DEN T-DEN T-DEN T-DEN	225G 227G 229G 231G 233G	FOURTH QUARTER Social Science Elective Pharmacology Clinical Dental Hygiene Preventive Dentistry General Pathology Dental Health Education	0 4 2 3
		FIFTH QUARTER	20
T-DEN T-DEN T-DEN T-DEN T-DPH T-PSY	235G 237G 238G 239G 240G 240G	Clinical Dental Hygiene Dental Lab Practice Oral Pathology Anesthesia Public Health and Practice Applied Psychology	3 2 2
			17
T-ENG T-PSY T-DEN T-DEN T-DPH T-DPH	204 250G 241G 243G 245G 250G	SIXTH QUARTER Oral Communication Educational Psychology Clinical Dental Hygiene Special Dental Practice School Health Services Nutrition	3 4 3 3
			19



DIESEL MECHANICS

H. Earl Hardison, Chairman
Department of Power Mechanics

Diesel mechanics keep bulldozers, tractors, and other diesel-powered equipment that is widely used on highways, on farms, and in industry in good operating order. Many diesel mechanics specialize in maintenance and repair of diesel equipment; others specialize in rebuilding engines. Those who do maintenance and repair work perform the periodic cleaning, adjusting, and tuneups that are necessary for efficient operation of diesel engines. Mechanics who specialize in rebuilding diesel engines that have been operated for many hours or miles, take the entire engine apart, examine all of the parts for defects, and repair or replace defective parts. They then reassemble and adjust the engine.

Diesel mechanics are taught proper use of handtools such as pliers, wrenches, and screwdrivers in their work. In addition, they are trained to use complex electronic testing equipment such as the dynamometer, which measures engine power, and mechanical lifting devices such as hoists. They are also taught to use machine tools such as grinders, drills, and lathes to make replacement parts for diesel-powered equipment.

An increasing number of diesel mechanics will be needed in the 1960's to maintain and repair the growing number of diesel engines used in American industry and commerce and on the roads and farms of the country.

The use of diesel engines to power farm and construction machinery, electric generators, trucks, buses, trains, automobiles and ships has been increasing. Many job openings in this field will be filled by mechanics who have had advanced training in diesel mechanics.

DIESEL MECHANICS

Course Title	Hours Credit
FIRST QUARTER	
PME 1101—Internal Combustion Engines MAT 1101—Fundamentals of Mathematics ENG 1101—Reading Improvement PHY 1101—Applied Science	$egin{array}{cccccccccccccccccccccccccccccccccccc$
SECOND QUARTER	
PME 1102—Engine Electrical and Fuel Systems PHY 1102—Applied Science ENG 1102—Communication Skills DFT 1101—Schematics and Diagrams: Power Mechanics WLD 1102G—Basic Arc Welding	$egin{array}{llll} \ldots & & 4 & & & & & \\ \ldots & & & 3 & & & & \\ \ldots & & 1 & & & & & \end{array}$
THIRD QUARTER	
AUT 1121—Braking Systems AUT 1123—Automotive Chassis and Suspensions DSE 1141G—Diesel Engine Principles and Components PSY 1101—Human Relations WLD 1101—Basic Gas Welding	$egin{array}{cccccccccccccccccccccccccccccccccccc$
	18
FOURTH QUARTER	
AUT 1124—Automotive Power Train Systems DSE 1142G—Fundamentals of Diesel Engine Mechanics BUS 1103—Small Business Operations	9
	18
FIFTH QUARTER	
DSE 1143G—Diesel Engine Maintenance and Repair DSE 1144G—Diesel Accessories AHR 1101—Automotive Air Conditioning	4
	18



MECHANICAL DRAFTING AND DESIGN

Ralph B. Leach, *Chairman*Department of Engineering Technology

This curriculum guide was prepared for the purpose of outlining a training program for students of drafting and design technology. There are certain identifiable duties which are common to all technicians of this general classification and which comprise the basic areas of technical knowledge they need. This curriculum has been designed for training persons in the accepted performance of these basic duties that will be assigned, and to enable the individual student to become proficient in a short time after

he becomes employed in the industry.

Courses in general education have been included to give a student the assurance that comes with education upon a broad base. The technician associates with many levels of thought and expression—administrative personnel, scientists, engineers, skilled workmen—and must be able to communicate effectively with all levels. Courses in the skills of communication, human relations, economics and the field of industrial organization, and management have been provided to assist the student to develop understanding and confidence. Courses containing essential information from related subject areas, such as mathematics, physics, and mechanics have been included in order to provide the student a better academic base for his training.

Mechanical drafting and design technicians are concerned with the preparation of drawings for design proposals, for experimental models and

items for production use.

These technicians perform many aspects of design in a specialized field, such as the developing of the design of a section, sub-assembly or major component. Investigating design factors and availability of material and equipment, production methods and facilities are frequent assignments. They also design units and controls from specifications by utilizing drawings of existing units and reports on functional performance or design components in industrial fields based in engineers' original design concepts or specific ideas. They are assigned as coordinators for the execution of related work of other design, production, tooling, material and planning groups. Technicians in this classification will often supervise the preparation of working drawings.

DRAFTING & DESIGN—MECHANICAL

	Course Title Quarter Hours Credit
FIRST QUART	'ER
T-ENG 101 T-MAT 101 T-PHY 101 T-DFT 101 T-MEC 101	Technical Mathematics 5 Physics: Properties of Matter 4 Technical Drafting 2
	16
_	RTER
T-ENG 102 T-MAT 102 T-PHY 102 T-DFT 102 T-MEC 102	Technical Mathematics 5 Physics: Work, Energy, Power 4 Technical Drafting 2 Machine Processes 2
THIRD QUART	TER.
T-ENG 103 T-MAT 103 T-PHY 103	Report Writing
T-PHY 106 T-DFT 103	Applied Mechanics 5 Technical Drafting 2
FOURTH QUA	TER 19
T-ENG 204 T-DFT 201 T-DFT 204 T-MEC 205 T-MEC 210	Oral Communication3Technical Drafting4Descriptive Geometry4
	19
FIFTH QUART	ER
T-DFT 205 T-DFT 211 T-MEC 211	Social Science Elective 3 Design Drafting I 4 Mechanisms 4 Physical Metallurgy 4 Elective* 4
	19
SIXTH QUART	
T-DFT 206 T-MEC 235	Social Science Elective 3 Design Drafting II 4 Hydraulics & Pneumatics 4 Elective* 4 Elective* 4
	19

^{*} Elective courses must be selected from an associate degree curriculum.



ELECTRONICS ENGINEERING TECHNOLOGY

Ralph B. Leach, Chairman

Department of Engineering Technology

The field of electronics has developed at a rapid pace since the turn of the century. Developments in the field of electronic controls and the demands for new products in the consumer market have revolutionized the industry.

Many opportunities exist for men and women with a technical education. This curriculum provides a basic background in electronic theory and practical applications of electronics for business and industry. Graduates are capable of handling a variety of positions that involve the operation, design, research, testing and sale of electronic equipment.

Sample job titles are: Communications Systems Engineer, Customer Service Engineer, Electronic Field Engineer, Junior Engineer, Technical Aide, Engineering Aide, Technical Sales Representative, Computer Technician, Technical Writer.

The courses in this curriculum are not designed for transfer to a senior college or university, but may be acceptable in some engineering schools.

ELECTRONICS TECHNOLOGY

	(Course Title	Quarter Hours Credit
FIRST O	QUARTER	₹	
T-ENG T-MAT T-PHY T-DFT T-ELC	101 101 101 101 101	Grammar Technical Mathematics Physics: Properties of Matter Technical Drafting Fundamentals of Electricity	5 4 2
SECONI	QUART	ER	20
T-ENG T-MAT T-PHY T-DFT T-ELC	102 102 102 102 102 102	Composition Technical Mathematics Physics: Work, Energy, Power Technical Drafting Fundamentals of Electricity	5 4 2
			20
THIRD (QUARTE	₹	
T-ENG T-MAT T-ELN T-ELN	103 103 101 105	Report Writing Technical Mathematics Electronic Instruments and Measurements Control Devices	. 5
			18
FOURTH	QUART	ER	
T-ENG T-MAT T-PHY T-ELN	204 201 104 205	Oral Communication Technical Mathematics Physics: Light and Sound Applications of Vacuum Tubes and Transistors	. 5
FIFTH Q	UARTER		
T-ELN T-ELN	210 214	Social Science Elective Semiconductor Circuit Analysis Wave Shaping and Pulse Circuits Elective*	. 6 . 3 . 3
CIVILLO	II A DÆED		15
SIXTH Q	UARTER	Social Science Elective	2
T-ELN T-ELN	215 220	Wave Shaping and Pulse Circuits Electronic Systems Elective*	. 3 . 7
			16

^{*} Elective courses must be selected from an associate degree curriculum.



ELECTRIC LINE TRADE

H. Earl Hardison, Chairman
Department of Power Mechanics

The Electric Line Trade program is 22 weeks in duration and provides the opportunity for persons interested in Electric Line work to learn the basic knowledge and skills needed in the trade.

The following objectives are established for the Electric Line Trade curriculum:

- 1. To provide an opportunity for the trainee to receive organized and supervised classroom and field training in the trade.
- 2. To develop within the trainee correct and safe habits and techniques of using the tools and equipment of the trade.
- 3. To teach the trainee the technical manipulative skills necessary to perform the jobs and operations of the electric line trade.
- 4. To teach the trainee the importance of good job planning enabling him to develop accuracy and efficiency of operation.
- 5. To present to the trainee a variety of experiences and problems to develop his ability to meet and cope with those problems he will encounter in the trade.
- 6. To develop the trainee's self-reliance, initiative, judgment and the proper attitude for accepting individual responsibility.
- 7. To develop in the trainee a willingness to accept instruction and supervision, and to respect his fellow workers.
- 8. To provide training in basic first aid and artificial respiration. Many job opportunities await the graduate of this program.

ELECTRIC LINEMEN

	Course Title	Quarter Hours Credit
FIRST QUARTE	R	
ELC 1110G ELC 1112G MAT 1114G PHY 1194G	Introduction to Electric Line Trade First Aid for Linemen Related Mathematics Physics of Matter	5
SECOND QUART	TER .	
ELC 1120G ELC 1122G	Electric Line Construction Transformers, relays, capacitors, and sectionalizers	
ELC 1124G PSY 1118G	Electrical Generation and Transmissions Human Relations	3







EXECUTIVE SECRETARY

Kenneth H. Neal, *Chairman* Department of Business

The demand for better qualified secretaries in our ever-expanding business world is becoming more acute. The purpose of this curriculum is to outline a training program that will provide training in the accepted procedures required by the business world and to enable persons to become proficient soon after accepting employment in the business office.

The Executive Secretary Curriculum is designed to offer the students the necessary secretarial skills in typing, dictation, transcription, and terminology for employment in the business world. The special training in secretarial subjects is supplemented by related courses in mathematics, accounting, business law, and personality development. During the last quarter, the student engages in six hours of office application each week in a business office.

The graduate of the Executive Secretary Curriculum should have a knowledge of business terminology, skill in dictation and accurate transcription of business letters and reports. The graduate may be employed as a stenographer or a secretary. Stenographers are primarily responsible for taking dictation and transcribing letters, memoranda, or reports. The secretary, in addition to taking dictation and transcribing, is given more responsibility in connection with meeting office callers, screening telephone calls, and being an assistant to an executive. She may enter a secretarial position in a variety of offices in businesses such as insurance companies, banks, marketing institutions, and financial firms.

EXECUTIVE—SECRETARIAL

	Ce	ourse Title	Quarter Hours Credit
FIRST O	QUARTER		
T-ENG T-BUS T-MAT T-BUS T-BUS	101 102 110 101 106	Grammar Typewriting (Or Elective)* Business Mathematics Introduction to Business Shorthand (Or Elective)*	3 5 5
SECONI	QUARTE	ER	20
T-ENG T-BUS T-BUS T-BUS T-BUS	102 103 107 120 115	Composition Typewriting (Or Elective)* Shorthand Accounting Business Law	4
THIRD	QUARTER		
T-ENG T-BUS T-BUS T-BUS T-BUS	103 104 108 110 112	Report Writing Typewriting Shorthand Office Machines Filing	3 4 3
			16
FOURTE	H QUARTE	E R	
T-ENG T-BUS T-BUS T-BUS T-EDP	214 206E 205 211 104	Oral Communication Dictation and Transcription (Executive) Advanced Typewriting Office Machines Introduction to Data Processing Systems	3
FIFTH (QUARTER		
T-ENG T-BUS T-BUS		Business Communication Dictation and Transcription (Executive) Secretarial Procedures Social Science Elective Elective*	4 4 3 6
OLVET (TT A DATE		20
SIXTH (QUARTER	Social Science Elective	3
T-BUS T-BUS	208E 271	Dictation and Transcription (Executive) Office Management Elective*	4
			16

^{*} Elective courses must be selected from an associate degree curriculum.



FORESTRY

William J. Seibert, Chairman

Department of Agriculture Technology

Forestry is the scientific management of forest lands for the continuous production of the many goods and services which man obtains from them. Forest lands produce wood and other products necessary to man; prevent soil erosion and regulate stream flow and water supply; constitute a home for wildlife; and serve as recreation areas for millions of persons.

Broad technological advancements have been made in the field of forestry during the past decade; these advances have resulted in the need for trained forest technicians to assist the professional forester in the various activities related to the production of our natural forests for maximum income, use and service and at the same time, conserve our water and forest. The professional forester is trained as a forest scientist. The public forest agencies as well as the forest industries need technicians to assist their professional personnel.

The purpose of the Agricultural Technology-Forestry curriculum is to help students acquire technical knowledge, understandings and abilities essential in developing for maximum production and income. The objectives are to develop understanding and ability in:

- 1. The principles and practices involved in the production and utilization of our forests and the conservation of our forest and water resources, with emphasis on practical application.
- 2. Communicating effectively and dealing with individual human behavior in working with the public.

Graduates should be qualified for entry into positions as forest technicians with federal and state forestry agencies and private forest industries. The graduate will have abilities in: timber cruising and marking trees, forest surveying, log and tree scaling, procuring forest products, supervising forest cutting operations, locating and maintaining forest roads and improvements, forest protection, operating forestry equipment, preparing records, and performing various related technical activities.

FORESTRY

Course Title	Quarter Hours Credit
FIRST QUARTER	
T-ENG 101 Grammar T-MAT 101 Technical Mathematics T-DFT 101 Technical Drafting T-FOR 101 General Forestry T-FOR 107 Tree Identification T-FOR 103 Safety and Woodsmanship	5 2 3 3 1
SECOND QUARTER	17
T-ENG 102 Composition T-AGR 129 Wildlife Science T-FOR 102 Forest Botany and Ecology T-FOR 105 Forest Soils T-ECO 102 Economics	4 6 3
	19
THIRD QUARTER T-ENG 103 Report Writing T-DFT 120 Topographic Drawing	3
T-FOR 104 Forest Tree Measurements T-FOR 109 Applied Silviculture T-CIV 101 Surveying	5
	19
FOURTH QUARTER	
T-ENG 204 Oral Communication T-FOR 208 Forest Surveying T-FOR 216 Forest Equipment T-FOR 206 Timber Cruising T-BUS 115 Business Law	$egin{array}{cccccccccccccccccccccccccccccccccccc$
FIFTH QUARTER	
T-FOR 212 Forest Aerial Photography Interpretation T-FOR 214 Forest Improvements Logging Social Science Elective Elective*	$egin{array}{cccccccccccccccccccccccccccccccccccc$
CIWARI OILADADA	16
T-FOR 219 Forest Recreation T-FOR 215 Forest Insects and Diseases T-FOR 217 Forest Fire Control T-FOR 218 Forest Field Seminar Social Science Elective Elective*	3 3 4

^{*} Elective courses must be selected from an associate degree curriculum.



LIVESTOCK AND POULTRY

William J. Seibert, *Chairman*Department of Agriculture Technology

Commercial poultry and livestock production are becoming increasingly specialized. Poultry and livestock farms continue to grow in size and value. By the year 1975 North Carolina will need to produce 60 per cent more broilers and chickens, 49 per cent more eggs and 49 per cent more turkeys. Similar increases in need for livestock and their products are anticipated.

The content of this curriculum is designed to give students a good understanding of the principles, methods, techniques and skills which are essential for successful employment in the poultry and livestock industry. Sound technical training is a requirement for successful employment in North Carolina's expanding poultry and livestock industry.

The objectives of the Poultry and Livestock Technology curriculum are to develop understanding and ability in:

- 1. Production, marketing, processing, and distributing livestock and poultry and their products according to the scientific principles essential to efficient and profitable operations.
- 2. Specializations of livestock and poultry industry, including automation, materials handling, manpower efficiency, production control, schedules and contractual arrangements; vertical and horizontal integration.
- 3. Practical principles of our economic system with emphasis on governmental policies and programs pertaining to agricultural production and marketing.
- 4. Effective communication and human relations in dealing with human behavior problems connected with the production, marketing, and distribution of agricultural products and supplies.

LIVESTOCK AND POULTRY

	C		Quarter Hours Credit
FIRST	QUARTER		
T-ENG T-MAT T-AGR T-AGR	101 110 125 180	Grammar Business Mathematics Animal Science General Poultry Science I	. 5
SECON	D QUARTE	$\mathbf{E}\mathbf{R}$	10
T-ENG	102		9
T-AGR T-CHM T-AGR	104	Composition Introduction to Agricultural Economics Chemistry Soil Science and Fertilizers	. 4
millipp	OHADWED		10
	QUARTER		0
T-ENG T-AGR T-AGR T-AGR	103 127 181 170	Report Writing Animal Nutrition General Poultry Science II Plant Science	. 6
			18
FOURT	H QUARTI	$\mathbf{E}\mathbf{R}$	
T-ENG T-AGR T-AGR T-AGR	204 225 204 280	Oral Communication Dairy and Beef Production Farm Business Management Poultry Health	. 6 . 6
FIFTH	QUARTER		
T-AGR T-AGR	205 224	Agricultural Marketing Livestock and Poultry Housing and Equipment Social Science Elective Electives*	. 4
			
SIXTH	QUARTER		
T-AGR T-AGR	226 218	Swine Production Agricultural Mechanization Social Science Elective Elective*	. 4 . 3

^{*} Elective courses must be selected from an associate degree curriculum.



MEDICAL SECRETARY

Kenneth H. Neal, Chairman Department of Business

The purpose of this curriculum is to outline a training program that will provide training in the accepted procedures required by the medical profession and to enable persons to become proficient soon after accepting employment in the medical office.

The Medical Secretary Curriculum is designed to offer the students the necessary secretarial skills in typing, dictation, transcription, and terminology for employment in the medical field. The special training in secretarial subjects is supplemented by related courses in mathematics, accounting, business law, personality development, and applied psychology. During the last quarter, the student engages in six hours of office application each week in a medical office.

The graduate of the Medical Secretary Curriculum should have a knowledge of medical terminology, skill in dictation and accurate transcription of medical letters and reports. The graduate may be employed as a stenographer or a secretary. Stenographers are primarily responsible for taking dictation and transcribing letters, memoranda, or reports. The secretary in addition to taking dictation and transcribing is given more responsibility in connection with meeting office callers and screening telephone calls.

MEDICAL—SECRETARY

	C	ourse Title	Quarter Hours Credit	
FIRST QU	ARTER			
T-ENG T-BUS T-MAT T-BUS T-BUS	101 102 110 101 106	Grammar Typewriting (Or Elective)* Business Mathematics Introduction to Business Shorthand (Or Elective)*	3 5 5	
andown o			20	
SECOND Q				
T-ENG T-BUS T-BUS T-BUS T-BUS	102 103 107 120 115	Composition Typewriting (Or Elective)* Shorthand Accounting Business Law	3 4 6	
THIRD QU	ARTER			
T-ENG T-BUS T-BUS T-BUS T-BUS	103 104 108 110 112 183M	Report Writing Typewriting Shorthand Office Machines Filing Terminology and Vocabulary (Medical)	3 4 3	
DOLLDERY C		an and an	19	
FOURTH O				
T-ENG T-BUS T-BUS T-BUS T-EDP T-BUS	204 206M 205 211 104 284M	Oral Communication Dictation and Transcription (Medical) Advanced Typewriting Office Machines Introduction to Data Processing Terminology and Vocabulary (Medical)	3 3 4	
FIFTH QU	ARTER			
T-ENG T-BUS T-BUS	206 207M 214	Business Communication Dictation and Transcription (Medical) Secretarial Procedures Social Science Elective Elective*	4 4 3	
SIXTH QUARTER				
T-BUS T-BUS	208M 271	Dictation and Transcription (Medical) Office Management Social Science Elective Elective*	3	

^{*} Elective courses must be selected from an associate degree curriculum.



PRACTICAL NURSING

Louise C. Bullock, *Chairman*Department of Health Occupations

The Licensed Practical Nurse is one who is prepared to meet the daily needs of the patient whose condition is relatively stable and to assist the Registered Nurse and/or Physician to meet the daily needs of the patient whose condition is unstable or complex.

Practical Nursing is an attractive, well paid, dignified career offering opportunity for service. Positions for the graduate licensed practical nurse far exceed the number of qualified persons available to fill them.

Work opportunities are not limited. Graduates may secure employment in hospitals, clinics, physicians' offices and convalescent homes. They are also eligible to take the Federal Civil Service Examination which entitles them to seek employment in government hospitals.

Established in 1950, the Goldsboro Program of Practical Nurse Education is a department of the Wayne Technical Institute. It is administered under the supervision of the Technical Institute and is affiliated at the Wayne County Memorial Hospital where the students receive their clinical practice. The primary purpose of this program is to provide education and training opportunity to interested and qualified persons who seek to become Licensed Practical Nurses.

PRACTICAL NURSING

Co	urse Title	Hours Credit
FIRST QUARTER		
Practical Nursing NUR 1110G NUR 1111G NUR 1112G NUR 1113G	Vocational Adjustments Health Basic Sciences Nursing I	4
	Totals	23
SECOND QUARTE	R	
Practical Nursing NUR 1120G NUR 1121G NUR 1122G NUR 1123G NUR 1124G	Common Drugs Nursing II Introduction to Medical-Surgery Nursing Introduction to Obstetrical Nursing Introduction to Pediatric Nursing	4 6 3
	Totals	19
THIRD QUARTER		
Practical Nursing NUR 1130G NUR 1131G NUR 1132G	III Medical-Surgery Nursing Maternal Nursing Pediatric Nursing	4
	Totals	17
FOURTH QUARTE	R	
Practical Nursing NUR 1140G NUR 1141G NUR 1142G	IV Medical-Surgery Nursing Vocational Adjustments II Maternal Nursing	3
	Totals	18



PSYCHIATRIC NURSE'S AIDE

Louise C. Bullock, *Chairman*Department of Health Occupations

Statistics reveal that more than 5,000,000 people become mentally ill every year. These victims suffer much distress. The lack of understanding and treatment of mental disorders by unqualified employees have contributed to the "costly lag" in this field.

It is apparent that a course, one offering basic knowledge of mental illnesses and beginning skills for giving personal and therapeutic care, is needed for those persons who are entering this area of health occupations.

The course is designed to prepare both men and women to become Nurse's Aides in a general hospital, a clinic, a private home or a nursing home, as well as any hospital or clinic offering treatment for the mentally disturbed.

This curriculum helps to meet some of the demands for Nursing Assistants. During this course of instruction, the student will also have emphasis placed on the care of the mentally retarded and geriatric patients, with clinical experience in both areas.

PSYCHIATRIC NURSE'S AIDE

	Course Title	Quarter Hours Credit
FIRST QUAR	TER	
PNA 1110G	Introduction to Health Services	1
PNA 1120G	Meeting Daily Physical Needs of Patients	
PNA 1130G	Assisting with Problems Related to Patient's N	
PNA 1140G	Nursing Procedures	
PNA 1150G	Procedures Related to Change in	
	Patient Placement	1
PNA 1160G	Meeting Mental and Emotional Needs of Patien	
PNA 1170G	Nursing Care of Psychiatric Patients	
PNA 1180G	Becoming A Hospital Employee	1
ENG 1102	Communication Skills	3
		15





SOIL CONSERVATION

William J. Seibert, Chairman

Department of Agriculture Technology

Our population survives on a thin, vital, living layer of the earth's surface known as top soil—the producer of food and wealth. Erosion, an insidious, sly and treacherous destroyer, has resulted in the loss of about one third of this top soil since our nation won its indipendence in 1776. Unless soil and water erosion is checked and replaced with constructive conserving methods, our living standards will be reduced and the United States will ultimately be destroyed. Many people are involved at the professional, technical and skilled level in conserving our soil and water resources.

The purpose of the Agricultural Technology-Soil Conservation Curriculum is to help students acquire knowledge, understandings and abilities essential in conserving soil and water resources. The specific objectives are to develop the following student competencies:

- 1. Understanding of the principles involved in soil and water conservation.
- 2. Understanding of farm production problems as related to soil and water conservation.
- 3. Ability to supply farmers, ranchers and others with technical assistance in planning, applying and maintaining measures and structural improvements for soil and water conservation.
- 4. Ability to communicate effectively and to deal with individual human behavior problems in working with farmers and ranchers.

Although the curriculum is primarily aimed at training soil conservation technicians, it is felt that graduates would be well qualified to serve in a technical capacity with the Agricultural Stabilization and Conservation program (ASCS) and with golf associations.

SOIL CONSERVATION

	Co	ourse Title	Quarter Hours Credit
FIRST	QUARTER		
T-ENG T-MAT T-DFT T-AGR T-PHY	101 101 101 125 101	Grammar Technical Mathematics Technical Drafting Animal Science Physics: Properties of Matter	5 2 6
SECON	D QUARTE	ZR	
T-ENG T-CHM T-AGR T-AGR	102 101 104 185	Composition Chemistry Introduction to Agricultural Economics Soil Science and Fertilizers	5 4
THIRD	QUARTER		
T-ENG T-CHM T-CIV T-AGR	103 106 101 170	Report Writing Chemistry Surveying Plant Science	5
FOURT	H QUARTE	ER	
T-ENG T-AGR T-AGR T-AGR T-AGR	204 278 285 286 290	Oral Communication Weed Identification and Control Soil Fertility Soil Classification Soil Conservation I	3 4 4
FIFTH	QUARTER		
T-AGR T-AGR T-AGR	279 291 274	Farm Forestry Soil Conservation II Pastures and Forage Crops Social Science Elective Elective*	5 4 3
SIXTH	QUARTER		
T-AGR T-AGR	292 27 0	Soil Conservation III General Bacteriology Social Science Elective Elective*	4

^{*} Elective courses must be selected from an associate degree curriculum.



TRACTOR MECHANICS

H. Earl Hardison, Chairman
Department of Power Mechanics

The history of the development and introduction of farm machinery is largely the history of what we call "modern civilization." The introduction of tools to cultivate the soil and lighten the labor of the farmer was immediately reflected in an improvement of the standard of living. The major factor in this growth and development has been the replacement of horsepower by power developed from gasoline and electricity.

As agriculture has become mechanized the need for trained specialists has increased. The hoe and scythe or the horse-drawn plow and rake required little repair or service that could not be provided on the farm. Modern machinery, however, is complicated and intricate and its general adoption and widespread use have created new areas of business oppor-

tunity.

This program is organized to provide a broad training to permit entrance into the field best suited to the interest and aptitude of the graduate. Emphasis is placed on the basic fundamental theory and related laboratory and shop techniques with specialization to be developed later in employment.

Graduates of this program can quickly adapt themselves for employment in the areas of sales, service, distribution, installation and maintenance. They may estimate cost and plan equipment installations or provide the service that must be done, not in the factory, but in the field, and done by personnel who thoroughly understand the problems of the farmer-purchaser.

TRACTOR MECHANICS

	(Course Title	Quarter Hours Credit
FIRST	QUARTER		
PME MAT ENG PHY	1101 1101 1101 1101	Internal Combustion Engines Fundamentals of Mathematics Reading Improvement Applied Science	5
SECON	D QUART	FR	10
PME ENG DFT PHY	1102 1102 1101 1102	Engine Electrical and Fuel Systems Communication Skills Schematics and Diagrams: Power Mechanics Applied Science	3
			$\frac{-}{17}$
THIRD	QUARTE	${f R}$	
PME PME WLD PSY	1113 1114 1101 1101	Farm Machinery Hydraulic Systems Farm Machinery Power Trains Basic Gas Welding Human Relations	6
FOURT	H QUART	ER	
	<u> </u>	Farm Machinery Suspensions and Implements Farm Machinery Service and Repair Basic Arc Welding Small Business Operations	6
ni nomi	TTTTC		10
DSE DSE DSE DSE DSE	1141G 1142G 1143G 1144G	Diesel Engine Principles & Components Fundamentals of Diesel Engine Mechanics Diesel Engine Maintenance & Repair Diesel Accessories	9

DESCRIPTION OF COURSES



AGRICULTURE

Quarter Hours Credit

T-AGR 104 Introduction to Agricultural Economics

4

An introduction to economics, the functions of the economic system and agriculture's role in the economy. A review of the functions of the manager and an introduction to the principles he uses in making decisions to adjust to changing conditions. Analysis of the main sources of change which affect agricultural firms.

Prerequisite: None.

T-AGR 125 Animal Science

6

An introductory animal science course covering the fundamental principles of livestock production. A study of the animal body and the basic principles of reproduction, genetics, growth, fattening, digestion, along with the selection, feeding, improvement, processing and marketing of livestock.

Prerequisite: None.

T-AGR 127 Animal Nutrition

6

A course dealing with the principles of nutrition and their application to feeding practices of cattle, horse, sheep and swine production in North Carolina.

Prerequisite: T-AGR 125.

T-AGR 129 Wildlife Science

4

An introduction to the major principles of wildlife management. Includes the study of selected birds, game animals, and fish; fishpond management, plants of value to wildlife, and laws governing wildlife.

Prerequisite: None.

T-AGR 150 General Horticulture

4

A course dealing with horticulture principles and the application of plant science fundamentals to horticultural practices.

Prerequisite: T-AGR 170.

T-AGR 170 Plant Science

6

An introductory general botany and crop science course covering the fundamental principles of the reproduction, growth, functions and development of seed bearing plants with application to certain commercially important plants in North Carolina.

Prerequisite: None.

T-AGR 180 General Poultry Science I

,

An introduction to the science of poultry production. The major phases of the study include the history of the poultry industry; the anatomy and physiology of the











chicken; the breeds and varieties; the breeding principles; the principles of incubation, brooding, rearing, feeding, housing, and management; marketing poultry products; and the science of disease and parasite prevention and control.

Prerequisite: None.

T-AGR 181 General Poultry Science II

3

A continuation of the study of the general principles and practices of the science of poultry production with emphasis on the application of these principles to specialized areas of poultry production.

Prerequisite: T-AGR 180.

T-AGR 183 Poultry Enterprises

6

A review of the growth of the various poultry enterprises, including market eggs, hatching eggs, and broiler production; marketing procedures; determining and controlling costs of production; choosing breeds and determining flock size, feeding systems, conversion ratios, labor efficiency, and other management factors.

Prerequisite: T-AGR 180.

T-AGR 185 Soil Science and Fertilizers

6

A course dealing with basic principles of efficient classification, evaluation, and management of soils; care, cultivation and fertilization of the soil, and conservation of soil fertility.

Prerequisite: None.

T-AGR 187 Fertilizers and Lime

4

A review of the source, function, and the use of the major and minor plant food elements; commercial fertilizer ingredients; soil acidity, liming materials; application of fertilizer and liming materials.

Prerequisite: None.

T-AGR 204 Farm Business Management

6

A review of the functions of the manager of a business firm and the problems he faces. Development of the concept of planning by both partial and complete budgeting. Review of the concepts of costs and the length of run in production. Practice in preparing enterprise budgets as an aid in choosing what to produce. Use of partial budgeting to find the least cost production procedure. Analysis of production data to select the level of production that yields the most net revenue. Relationship between size, efficiency and income of a farm. Review of procedures for evaluating the efficiency of the manager.

Prerequisite: T-AGR 104.

T-AGR 205 Agricultural Marketing

6

An analysis of the functions of marketing in the economy and a survey of the problems marketing faces. A review

of the market structure and the relationship of local, terminal, wholesale, retail and foreign markets. Problems in the operations of marketing firms including buying and selling, processing, standardization and grading, risk taking and storage, financing, efficiency, and cooperation. Discussion of procedures of marketing such commodities as grain, cotton, livestock and tobacco.

Prerequisite: T-AGR 104.

T-AGR 206 Agricultural Finance

3

Analysis of the capital structure of modern commercial agriculture with emphasis on the sources of credit. A review of lending institutions, repayment schedules, and credit instruments. Practice in the procedure of evaluating farm resources with attention to information needed for resource valuation, appraisal farms and procedures, discounting and depreciation.

Prerequisite: None.

T-AGR 209 Agricultural Prices

3

An introduction to the functions of prices in our economic system and the effects of changing price levels. The influence consumer demand has on prices through price and income elasticities. A review of the influence of cycles and timing of production along with an examination of the use of future commodity contracts. Application of the principles of price analysis to price control and parity programs. Familiarization with the various tools widely used in historical analysis and forecasting. Prerequisite: None.

T-AGR 218 Agricultural Mechanization

4

A study of farm machinery management and labor-saving devices. The economics of selection and operation of farm machinery. Study and evaluation of feed grinders and mixers, storage facilities, materials handling systems and other labor-saving devices.

Prerequisite: None.

T-AGR 222 Farm Electrification

Δ

A study of the basic principles and systems, and their application to agricultural production with emphasis on equipment for controlling the utilization of electricity.

Prerequisite: None.

T-AGR 224

Livestock and Poultry Housing and Equipment

4

A study of the housing and equipment utilized in efficient livestock production and marketing. Farm livestock structures. Automatic feeding and watering systems. Specialized equipment for care of livestock and maintenance of quality of livestock products.

An analysis of principles of poultry housing and ventilation. The use of automatic ventilation equipment and popular brooding equipment. Egg washing equipment.







High-density brooding and laying houses. Hatchery equipment.

Prerequisites: T-AGR 180, T-AGR 125.

T-AGR 225 Dairy and Beef Production

6

A study of the principles of selection, breeding, feeding, care and management of dairy and beef cattle.

Prerequisite: T-AGR 125.

T-AGR 226 Swine Production

4

Development of the swine production and marketing industries; principles and practices of selection, breeding, feeding, housing, marketing and management of swine. Prerequisite: T-AGR 125.

T-AGR 228 Livestock Diseases and Parasites

4

A course dealing with the common diseases and parasites of livestock; sanitation practices and procedures with emphasis on the cause, damage, symptoms, prevention and treatment of parasites and diseases, and management factors relating to disease and parasite prevention and control.

Prerequisite: T-AGR 125.

T-AGR 235 Animal Breeding

4

A combined study of reproduction and inheritance. The anatomy and physiology of reproduction, theory and techniques of artificial insemination, and maintenance of reproductive efficiency. The principles of inheritance, breeding systems, and selection.

Prerequisite: T-AGR 125.

T-AGR 270 General Bacteriology

4

A general bacteriology course dealing with the structure, development and function of bacteria and other microorganisms. Emphasis on those organisms associated with water and soil, and the role of microorganisms in nature. Prerequisite: None.

T-AGR 274 Pastures and Forage Crops

3

A course dealing with the fundamentals of pastures and forage crops and management. A study of the major grasses and legumes of economic importance in North Carolina. Soil site relationships and plant adaptation will be stressed.

Prerequisite: T-AGR 170.

T-AGR 278 Weed Identification and Control

3

A study of the identification and control of the annual and perennial weeds of economic importance in North Carolina.

Prerequisite: None.

T-AGR 279 Farm Forestry

A course dealing with the fundamentals of forestry and farm forestry problems, including planting, protecting, thinning, and harvesting.

Prerequisite: None.

T-AGR 280 Poultry Health

1

The principles and practices of poultry disease and parasite prevention and control. The mortality problem and the nature of disease. The types of organisms causing poultry diseases. The methods of disease prevention and control. Nutritional disorders and miscellaneous conditions. The major poultry diseases. Prevention and control of internal and external parasites. Controlling flock mortality.

Prerequisite: T-AGR 180.

T-AGR 283 Hatchery Management

3

The development of artificial incubation and modern methods of hatchery operation. The advantages and disadvantages of various types of available commercial hatchery equipment. The latest information on principles and practices involved in efficient hatchery operation.

Prerequisite: T-AGR 180.

T-AGR 284 Marketing Poultry Products

4

A summary of the latest processing and marketing methods for poultry products. Grading, processing, packing, storing, and marketing shell eggs. The egg products industry. Processing, grading, packing and merchandising poultry meat. Prices and market information. Promotion and advertising of poultry products. Egg and poultry legislation.

Prerequisite: T-AGR 180.

T-AGR 285 Soil Fertility

A

A course dealing with soil fertility principles. The application of these principles to the North Carolina soils soil fertility evaluation and soil conservation practices. Prerequisite: T-AGR 185.

T-AGR 286 Soil Classification

1

A study of the classification of soils and the interpretation and evaluation of soil classification in determining soil management practices. Origin of soil; soil profile properties; soil survey programs and soil maps. Field study of selected soil series.

Prerequisite: T-AGR 185.

T-AGR 290 Soil Conservation I

5

An introduction to soil conservation, covering what is included in soil and water conservation, the public interest in soil and water conservation, who is involved in soil













and water conservation, the available resources to carry out soil and water conservation measures, and the relationship of specialized knowledge in agronomy, biology, economics, engineering, soils, forestry and recreation.

Prerequisites: T-AGR 170, T-AGR 185.

T-AGR 291 Soil Conservation II

5

This includes principles of rendering assistance in conservation planning, procedures for preplanning in conservation planning, actual assistance in planning the conservation program, and actual assistance in laying out and designing conservation programs. This involves working with individual landowners on specific soil and water conservation problems, and in determining correct alternatives for treatment.

Prerequisite: T-AGR 290.

T-AGR 292 Soil Conservation III

5

A detailed study and on-site training, covering the proper servicing of conservation plans, revising plans, keeping plans current and up-to-date, maintenance of conservation measures applied to the land, and the procedure for keeping plans abreast of the times.

Prerequisites: T-AGR 290, T-AGR 291, T-AGR 285, T-AGR 286, T-CIV 101.

T-AGR 296 Agricultural Programs and Agencies

4

A review of the public agriculture programs and agencies that provide services for agricultural producers. The objectives, organization, functions and services of these organizations.

Prerequisite: T-AGR 104.

T-AGR 299 Recreation

3

Principles and problems involved in the planning of private resources and in the utilization of our natural resources for recreational purposes.

Prerequisite: None.

AIR CONDITIONING AND HEATING

Quarter Hours Credit

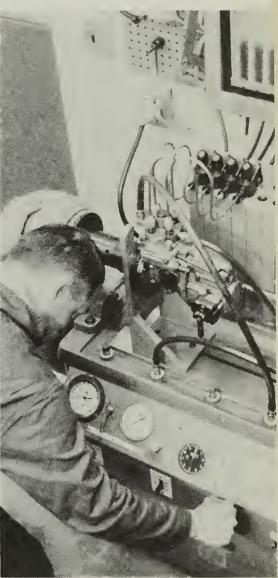
AHR 1101 Automotive Air Conditioning

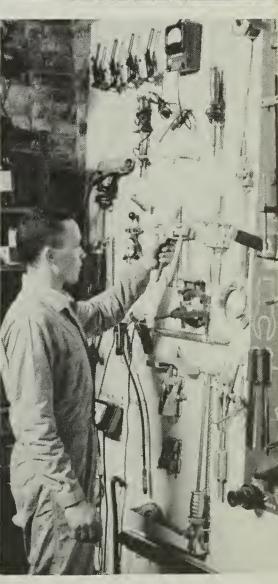
General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, the methods of operation, and control; proper handling of refrigerants in charging the system.

Prerequisite: PHY 1102.









AUTOMOTIVE

Quarter Hours Credit

AUT 1121 Braking Systems

4

A complete study of various braking systems employed on automobiles and lightweight trucks. Emphasis is placed on how they operate, proper adjustment, and repair. Prerequisite: PHY 1102.

AUT 1123

Automotive Chassis and Suspension Systems

6

Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of suspension and steering systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, and front end and alignment. Prerequisite: PME 1102.

AUT 1124

Automotive Power Train Systems

6

Principles and functions of automotive power train systems: clutches, transmission gears, torque converters, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair.

Prerequisites: PHY 1102, AUT 1123.

AUT 1125

Automotive Servicing

6

Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Troubleshooting of automotive systems, providing a full range of experiences in testing, adjusting, repairing and replacing.

Prerequisites: AUT 1123, AUT 1121, AHR 1101.

BUSINESS

Quarter Hours Credit

T-BUS 101

Introduction to Business

Creu

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management.

Prerequisite: None.

T-BUS 102

Typewriting

3

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

Prerequisite: None.

T-BUS 103 Typewriting

3

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms.

Prerequisite: T-BUS 102 or the equivalent. Speed requirement, 30 words per minute for five minutes.

T-BUS 104 Typewriting

3

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms.

Prerequisite: T-BUS 103 or the equivalent. Speed requirement, 40 words per minute for five minutes.

T-BUS 106 Shorthand

4

A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.

Prerequisite: None.

T-BUS 107 Shorthand

Δ

Continued study of theory with greater emphasis on dictation and elementary transcription.

Prerequisite: T-BUS 106 or the equivalent.

T-BUS 108 Shorthand

4

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.

Prerequisite: T-BUS 107.

T-BUS 110 Office Machines

3

A general survey of the business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and calculator.

Prerequisite: None.

T-BUS 112 Filing

3

Fundamentals of indexing and filing, combining theory and practice by the use of miniature letters, filing boxes and guides. Alphabetic, Triple Check, Automatic, Geographic, Subject, Soundex, and Dewey Decimal filing. Prerequisite: None.

T-BUS 115 Business Law

3

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.

Prerequisite: None.

T-BUS 116 Business Law

3

Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership-corporation, mortgages, and property rights.

Prerequisite: T-BUS 115.

T-BUS 120 Accounting

6

Principles, techniques and tools of accounting, for understanding of the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned.

Prerequisite: T-MAT 110.

T-BUS 121 Accounting

6

Partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.

Prerequisite: T-BUS 120.

T-BUS 123 Business Finance

3

Financing of business units, as individuals, partnerships, corporations, and trusts. A detailed study is made of short-term, long-term, and consumer financing.

Prerequisite: None.

T-BUS 124 Business Finance

3

Financing, federal, state, and local government and the ensuing effects upon the economy. Factors affecting supply of funds, monetary and credit policies.

Prerequisite: T-BUS 123.

T-BUS 183E Terminology and Vocabulary

.

To develop an understanding of the terminology and vocabulary appropriate to the course of study, as it is used in business, technical, and professional offices.

Prerequisite: T-BUS 107.











T-BUS 183M Terminology and Vocabulary

To develop an understanding of the terminology and vocabulary appropriate to the course of study, as it is used in business, technical and professional offices.

Prerequisite: T-BUS 107.

T-BUS 205 Advanced Typewriting

3

Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation, and the typing of reports, manuscripts and legal documents.

Prerequisite: T-BUS 104. Speed requirement, 50 words per minute for five minutes.

T-BUS 206E Dictation and Transcription

4

Develops the skill of taking dictation and of transcribing at the typewriter materials appropriate to the course of study, which includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Minimum dictation rate of 100 words per minute required for five minutes on new material.

Prerequisite: T-BUS 108.

T-BUS 206M Dictation and Transcription

4

Develops the skill of taking dictation and of transcribing at the typewriter materials appropriate to the course of study, which includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Minimum dictation rate of 100 words per minute required for five minutes on new material. Prerequisite: T-BUS 108.

T-BUS 207E

Dictation and Transcription

4

Covering materials appropriate to the course of study, the student develops the accuracy, speed, and vocabulary that will enable her to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 110 words per minute required for five minutes on new material.

Prerequisite: T-BUS 206.

T-BUS 207M Dictation and Transcription

Covering materials appropriate to the course of study, the student develops the accuracy, speed, and vocabulary that will enable her to meet the stenographic requirements of business and professional offices. Minimum dictation rate of 110 words per minute required for five minutes on new material.

Prerequisite: T-BUS 206M.

T-BUS 208E Dictation and Transcription

4

Principally a speed building course, covering materials appropriate to the course of study, with emphasis on speed as well as accuracy. Minimum dictation rate of 120 words per minute required for five minutes on new material.

Prerequisite: T-BUS 207.

T-BUS 208M Dictation and Transcription

4

Principally a speed building course, covering materials appropriate to the course of study, with emphasis on speed as well as accuracy. Minimum dictation rate of 120 words per minute required for five minutes on new material.

Prerequisite: T-BUS 207.

T-BUS 211 Office Machines

3

Instructions in the operation of the bookkeeping-accounting machines, duplicating equipment, and the dictating and transcribing machines.

Prerequisite: T-BUS 110.

T-BUS 214 Secretarial Procedures

4

Designed to acquaint the student with the responsibilities encountered by a secretary during the work day. These include the following: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims.

Prerequisite: None.

T-BUS 215E Office Application

6

During the sixth quarter only, students are assigned to work in a business, technical, or professional office for six hours per week. The objective is to provide actual work experience for secretarial students and an opportunity for the practical application of the skills and knowledge previously learned, according to the course of study.

Prerequisites: T-BUS 214, T-BUS 205, T-BUS 208, T-BUS 211.

T-BUS 215M Office Application

6

During the sixth quarter only, students are assigned to work in a business, technical, or professional office for six hours per week. The objective is to provide actual work experience for secretarial students and an opportunity for the practical application of the skills and knowledge previously learned, according to the course of study. Prerequisites: T-BUS 214, T-BUS 205, T-BUS 208, T-BUS 211.













T-BUS 217 Business Law

3

A study of the powers, policies, methods, and procedures used by the various federal, state and local administrative agencies in promoting and regulating business enterprises. It includes a consideration of the constitutional and statutory limitations on these bodies and judicial review of administrative action.

Prerequisite: T-BUS 116

T-BUS 219 Credit Procedures and Problems

3

Principles and practices in the extension of credit; collection procedures; laws pertaining to credit extension and collection are included.

Prerequisite: T-BUS 120

T-BUS 222 Accounting

6

Thorough treatment of the field of general accounting, providing the necessary foundation for specialized studies that follow. The course includes, among other aspects, the balance sheet, income and surplus statements, fundamental processes of recording, cash and temporary investments, and analysis of working capital.

Prerequisite: T-BUS 121.

T-BUS 223 Accounting

6

Additional study of intermediate accounting with emphasis on investments, plant and equipment, intangible assets and deferred charges, long-term liabilities, paidin capital, retained earnings, and special analytical processes.

Prerequisite: T-BUS 222.

T-BUS 225 Cost Accounting

4

Nature and purposes of cost accounting; accounting for direct labor, materials, and factory burden; job cost, and standard cost principles and procedures; selling and distribution cost; budgets, and executive use of cost figures.

Prerequisite: T-BUS 121.

T-BUS 227 Advanced Accounting

4

Advanced accounting theory and principles as applied to special accounting problems, bankruptcy proceedings, estates and trusts, consolidation of statements, parent, and subsidiary accounting.

Prerequisite: T-BUS 223.

T-BUS 229 Taxes

4

Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise, and inheritance.

Prerequisite: T-BUS 121.

T-BUS 232 Sales Development

A study of retail, wholesale and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for and execution of sales demonstrations required.

Prerequisite: None

T-BUS 233 Personnel Management

Principles of organization and management of personnel, procurement, placement, training, performance checking, supervision, remuneration, labor relations, fringe benefits and security.

Prerequisite: None

T-BUS 235 Business Management

3

3

3

Principles of business management including overview of major functions of management, such as planning, staffing, controlling, directing, and financing. Clarification of the decision-making function versus the operating function. Role of management in business—qualifications and requirements.

T-BUS 237 Wholesaling

3

The development of wholesaling; present day trends in the United States. A study of the functions of wholesaling.

Prerequisite: None

T-BUS 239 Marketing

5

A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in the marketing process.

Prerequisite: None

T-BUS 243 Advertising

4

The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals; product and market research; selection of media; means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media.

Prerequisite: None

T-BUS 245 Retailing

3

A study of the role of retailing in the economy including development of present retail structure, functions performed, principles governing effective operation and managerial problems resulting from current economic and social trends.

Prerequisite: None













T-BUS 247

Business Insurance

3

A presentation of the basic principles of risk insurance and their application. A survey of the various types of insurance is included.

Prerequisite: None

T-BUS 255

Interpreting Accounting Records

3

Designed to aid the student in developing a "use understanding" of accounting records, reports and financial statements. Interpretation, analysis, and utilization of accounting statements.

Prerequisite: T-BUS 121

T-BUS 266

Budget and Record Keeping

3

The basic principles, methods, and procedures for preparation and operation of budgets. Special attention is given to the involvement of individual departments and the role they play. Emphasis on the necessity for accurate record keeping in order to evaluate the effectiveness of budget planning.

Prerequisite: T-BUS 121

T-BUS 269

Auditing

4

Principles of conducting audits and investigations; setting up accounts based upon audits; collecting data on working papers; arranging and systemizing the audit, and writing the audit report. Emphasis placed on detailed audits, internal auditing, and internal control.

Prerequisite: T-BUS 223.

T-BUS 271

Office Management

3

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems.

Prerequisite: None

T-BUS 272

Principles of Supervision

3

Introduces the basic responsibilities and duties of the supervisor and his relationship to superiors, subordinates, and associates. Emphasis on securing an effective work force and the role of the supervisor. Methods of supervision are stressed.

Prerequisite: None.

T-BUS 284M

Terminology and Vocabulary

9

Greater emphasis on an understanding of the terminology and vocabulary appropriate to the course of study, as it is used in business, technical, and professional offices.

Prerequisite: T-BUS 183M.

BUS 1102 Typewriting

3

A beginning course in touch typewriting, with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, and tabulation.

Prerequisite: None.

BUS 1103

Small Business Operations

3

An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relations.

Prerequisite: None.

BIOLOGY

Quarter Hours Credit

T-BIO 130G

Biology (General)

Δ

Anatomy and physiology of animals including chemical and physical processes such as cellulose, respiration, reproduction, development, energy production and transfer.

T-BIO 140G

Anatomy and Physiology

4

Gross and microscopic anatomy of the human body and the functions of its parts. Emphasis is on form and structure and the study of the systems and their interrelations. Laboratory work includes microscopic anatomy.

Prerequisite: T-B10 130 G

T-BIO 145G

Histology and Embryology

3

Lecture and laboratory study of the fundamental body tissues and the different phases of embryonic development. Emphasis is on the origin and structure of the tissue of the oral cavity.

Prerequisite: T-B10 130G and T-DEN 129G

T-BIO 150G

Microbiology

5

General and medical microbiology, asepsis disinfection, sterilization, cultivation and identification. Tests used for diagnosis and immunization. The relationship of pathogenic microbiology to oral disease.

Prerequisite: T-CHM 120G, T-BIO 145G

T-BIO 230G

Biology . . . Anatomy and Physiology

4

(3 class hours, 2 lab. hours)

Continued study of gross and microscopic anatomy, the relationship of function to structure with emphasis on basic physiology. (Chemical tests and dissections).

Prerequisite: T-BIO 130G and T-BIO 140G













CHEMISTRY

Quarter Hours Credit

T-CHM 101 Chemistry

5

Study of the physical and chemical properties of substances, chemical changes; elements, compounds, gases, chemical combinations; weights and measurements; theory of metals; acids, bases, salts, solvents, solutions, and emulsions. In addition, study of carbohydrates; electrochemistry, electrolytes, and electrolysis in their application of chemistry to industry.

Prerequisite: T-MAT 101.

T-CHM 106 Chemistry

5

General course in inorganic chemistry. Properties of acids, salts, bases, and solutions. Chemical and physical properties of selected inorganic elements are studied in detail. Laboratory work will consist of various inorganic tests and experiments.

Prerequisite: T-CHM 101.

T-CHM 120G Chemistry for Dental Hygienist

2

Fundamental concepts of inorganic chemistry including composition of substances, kinetic and molecular theories, atomic structure and bonding, solutions and colloids.

T-CHM 125G Bio-Chemistry (for Dental Hygiene)

4

A study of the structure and function of cells, including such items as the physical and chemical properties of protoplasmic cell division, animal and plant cell nutrition and cell metabolism. The second part of this study will include fundamental concepts of organic chemistry of the cell.

Prerequisite: T-CHM 120G

CIVIL ENGINEERING

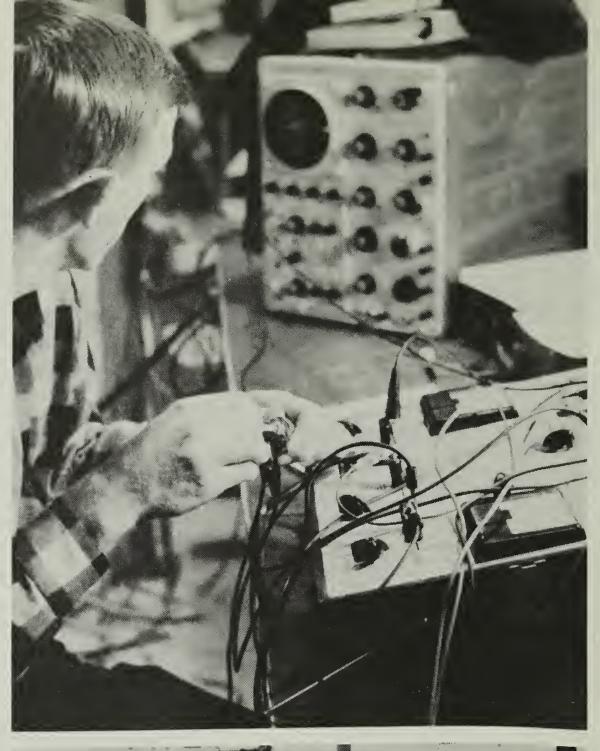
Quarter Hours Credit

T-CIV 101 Surveying

4

Theory and practice of plane surveying including taping, differential and profile leveling, cross sections, earthwork computations, transit, stadia, and transit-tape surveys.

Corequisites: T-MAT 101, T-DFT 101.





DATA PROCESSING

Quarter Hours Credit

T-EDP 104 Introduction to Electronic Data Processing Systems

4

A study of the fundamental concepts and operational principles of data processing system. They are presented as an aid in developing a basic knowledge of computers as a prerequisite to the detail study of a particular system. This course also provides a general knowledge of computing systems and is a prerequisite for all programming courses.

Prerequisite: None.

DENTAL

Quarter Hours Credit

DEN 1001 Introduction to Dental Assisting

9

An introduction to the history of dental assisting, the modern role of the dental assistant in practice and in relation to other members of the dental health team, and the personal and ethical requirements for safe and effective practice.

Prerequisite: None.

DEN 1002 Dental Materials

5

Identification of dental materials, characteristics of each, evaluation of quality, and principles and procedures related to manipulation and storage of various dental materials.

Prerequisite: None.

DEN 1003 Preclinical Sciences I

1

Basic information from bacteriology, anatomy and physiology, and oral and dental anatomy as related to dental science and the practice of dental assisting. Designed as three units which may be scheduled for either concurrent or sequential teaching.

Prerequisite: None.

DEN 1004 Preclinical Sciences II

4

Fundamental information from oral pathology, pharmacology, nutrition, and common emergencies as related to the role of the dental assistant. Designed in four units to permit flexibility in scheduling.

Prerequisite: DEN 1003.

DEN 1005 Dental Accounting

4

Fundamentals of accounting as applied to dental office procedures. Practice in application of principles to various forms commonly used in the dental office.

Prerequisite: None.

DEN 1006 Clinical Procedures I

8

Principles and procedures related to radiology, dental instruments and equipment, and chairside techniques of dental assisting. Designed in three units for flexibility in scheduling.

Prerequisite: DEN 1002.

DEN 1007

Clinical Procedures II

7

Role of the dental assistant in various dental specialties, such as endodontics, periodontics, orthodontics, prosthetics, and oral surgery.

Prerequisite: DEN 1006.

DEN 1008

Dental Office Management

5

Principles and procedures related to management of the dental office, including maintenance of inventories, ordering of supplies, patient records, financial records, making appointments and establishing favorable patient relations.

Prerequisite: DEN 1005.

DEN 1009

Dental Office Practice I

4

Introduction to practice in the dental office or dental clinic; emphasis is on the role of the dental assistant in the operatory in a variety of dental procedures.

Prerequisite: DEN 1008

DEN 1010

Dental Office Practice II

7

Practice in the dental office or dental clinic; rotation of assignments to encompass experience in office management, the dental laboratory, and the operatory. Emphasis on chairside assisting in a variety of clinical procedures. Prerequisite: DEN 1009.

DEN 1011

Dental Assistant Seminar

1

Study of personal responsibilities as a practitioner, including employee-employer relations, opportunities for continued development as a person and as a health worker, and importance of organization membership.

Prerequisite: None.

T-DEN 127G

Dental Hygiene and Ethics

2

History of Dental Hygiene and ethical practice: History of Dental Hygiene and ethical practice; proper oral hygiene technique.

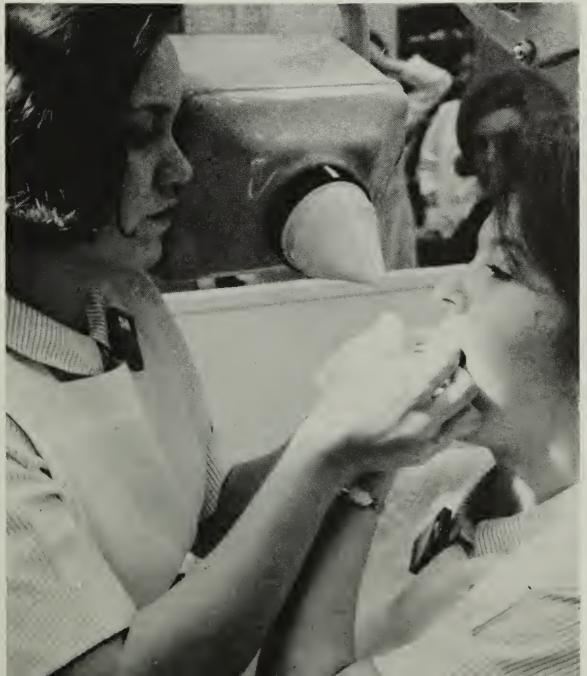
T-DEN 129G

Dental Anatomy

3

Nomenclature, arrangement and structure of the human dentition and surrounding tissues. Drawing of the permanent teeth to scale.





T-DEN 131G Dental Office Practice and Dental Materials

Preparation for practical office assistance, covering all phases of the functioning of a dental office. Personality training, reception of patients, use of the telephone, typing, care of dental equipment and instruments, inventory and ordering of supplies, recall system, billing and filing. Both class and laboratory hours will be devoted to identification of dental materials, together with manipulation and evaluation of these materials.

Prerequisite: Typewriting

T-DEN 133G Dental Anatomy

Study of growth, development and function of the teeth, carving wax models of permanent teeth.

3

5

2

3

4

4

Prerequisite: T-DEN 129G

T-DEN 135G Dental Hygiene . . . Dental Manikin Practice

Removal of simulated deposits and accretions on the teeth of manikins by use of dental instruments, stressing proper scaling and polishing techniques, toothbrushing and general mouth cleanliness.

Prerequisite: T-DEN 1276, T-DEN 129G, T-DEN 133G.

T-DEN 137G Radiology (Dental)

Proper use of dental x-ray equipment. Exposure, development and mounting of dental films. Practical application in clinical setting.

T-DEN 225G Pharmacology (Dental Hygiene)

The action of drugs, their sources, properties and preparation. Administration and drug action as related to dentistry.

Prerequisite: T-DEN 133G and T-BIO 150G.

T-DEN 227G Clinical Dental Hygiene

Dental prophylaxis performed on patients, mouth inspection, tonical application of fluorides, home care instruction to the patient. Practice in dental assisting, sterilizing techniques in the clinic, processing, exposing and mounting radiographs. Instruction in dental health education . . . teaching by the chairside.

T-DEN 229G Preventive Dentistry

Preventive methods for maintaining the health of the mouth and control of dental caries. Detailed studies of the latest methods of caries control through laboratory tests, diet and fluoridation. Study of the teeth not in normal occlusion, classification and probable factors causing orthodontic conditions. Introduction to abnormal oral conditions found in children, with possible methods of treatment.

Prerequisite: T-DEN 129G, T-DEN 133G and T-BIO 145G.

96

T-DEN 231G General Pathology

2

A broad picture of the disease process through a study of common, general diseases, their causes, results and treatment. Emphasis on the principles of inflammation, healing and repair.

Prerequisite: T-BIO 150G, T-BIO 145G, T-BIO 140G.

T-DEN 233G

Dental Health Education

3

The role of dental health in society. Reviewing Preventive Dentistry measures and their use in individual and group instruction. Study and preparation of instructional aids and source materials for dental health education. Demonstrations in methods of teaching dental health.

Prerequisite: T-DEN 135G, T-DPH 140G, T-BIO 150G.

T-DEN 235G

Clinical Dental Hygiene

4

A continuation of T-DEN 227G Clinical Dental Hygiene Practice.

Prerequisite: T-DEN 227G.

T-DEN 237G

Dental Laboratory Practice

3

An introduction to the restorative phase of dentistry. Dental Laboratory procedures by lecture, demonstrations and actual processing of laboratory projects by students. History, characteristics and use of various dental laboratory materials.

Prerequisite: T-DEN 129G, T-DEN 133G.

T-DEN 238G

Oral Pathology

2

Oral diseases; their causes, recognition and treatment, with special emphasis on the application of principles presented in DH 310, General Pathology.

Prerequisite: T-DEN 231G, T-DEN 133G.

T-DEN 239G

Anesthesia

2

Principles of general and local anesthesia and patient management.

T-DEN 241G

Clinical Dental Hygiene

4

A continuation of T-DEN 235G, Clinical Dental Hygiene Practice.

Prerequisite: T-DEN 235G.

T-DEN 243G

Special Dental Practices

3

Various specialty practices in dentistry including periodontia, prosthodontia, orthodontia, endodontia, exodontia, oral and maxillofacial surgery. Basic principles of diagnosis and treatment with special emphasis on the role of the dental hygienist in these areas of dentistry.





DENTAL PUBLIC HEALTH

Quarter Hours Credit

T-DPH 140G

Public Health (Hygiene)

2

Various factors which affect the total health status of the individual and the effective application of sound health principles in solving health problems.

T-DPH 240G

Public Health and Public Health Practice

3

Survey of public health organizations and activities, with special emphasis on those related to oral health. Observation and field trips in conjunction with local health departments.

T-DPH 245G

School Health Services

3

The place and function of health services in public education; factors which influence the health status of the child in the school environment; the coordination of school and community health services. Laboratory will include practice in screening school children for dental defects and in teaching dental health. (2-4 hours per week will be spent in the schools)

T-DPH 250G

Public Health Nutrition

3

Principles of nutrition, roles and sources of various food groups, variables that influence nutritional needs.

Prerequisite: T-CHM 120G and T-BIO 140G

DIESEL

Quarter Hours Credit

DSE 1141G

Diesel Engine Description, Principles and Components

A general description of diesel engines, their characteristics, classification, cylinder arrangement and engine designation. The principle of operation, including timing, compression, combustion, scavenging, supercharging, piston speed and speed factors. The student will become familiar with and learn to identify each engine part by sight, and should learn their correct names and their particular functions.

Prerequisites: PME 1101, PME 1102.

DSE 1142G

Fundamentals of Diesel Engine Mechanics

9

Theoretical knowledge of diesel fuels, fuel systems, lubrication, lubrication systems, cooling systems, air intake systems, starting and reversing methods, vibration and balancing. Prerequisites: DSE 1141G.

DSE 1143G

Diesel Engine Maintenance and Repairs

11

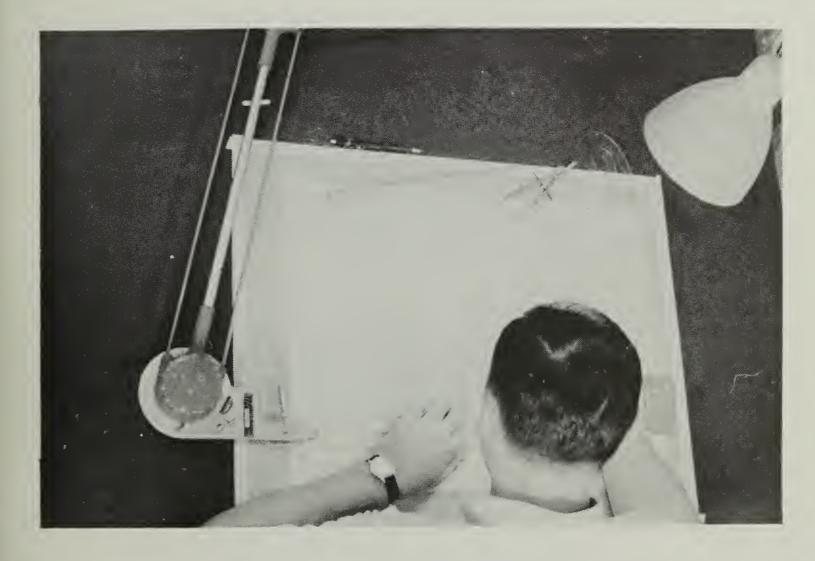
The student will disassemble and assemble the complete engine, start and operate the engine, make adjustments,











and tests while engine is in operation. Prerequisites: DSE 1141G, DSE 1142G.

DSE 1144G

Diesel Accessories

4

The basic theories of hydraulic and pneumatic systems. Combinations of systems in various circuits. Basic designs and function of circuits and motors, controls, electro-hydraulic servomechanisms, plumbing, filtration, accumulators and reservoirs.

DRAFTING

Quarter **Hours Credit**

T-DFT 101

T-DFT 102

Technical Drafting

The field of drafting is introduced as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are: use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective are introduced.

Technical Drafting

Prerequisite: None.

2

The application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, simple and succesive revolutions, and sections and conventions will be studied. Most important is the introduction of the graphical analysis of space problems. Problems of practical design elements involving points, lines, planes, and a combination of these elements shall be studied. Dimensioning practices for "details" and "working drawings," approved by the American Standards Association will also be included. Introduction is given to intersections and developments of various types of geometrical objects.

Prerequisite: T-DFT 101.

T-DFT 103 Technical Drafting

2

Intersection and developments and their practical solutions. Where applicable, model solutions accompany the problems. The various techniques employed to produce and render isometric and oblique drawings, isometric, dimetric and trimetric projections, will be included. Prerequisite: T-DFT 102.

T-DFT 120

Topographic Drawing

3

Application of drawing techniques to land suvreying, including boundaries, roads, buildings, and elevations. Prerequisite: T-DFT 101.

T-DFT 201 Technical Drafting

Applications and constructions of charts, graphs, and nomographs in engineering and technical data. Screw threads, springs, keys, rivets, piping, and welding symbols, methods of representing and specifying will be covered. Basic mechanisms of motion transfer, gears and cams, will be studied and drawn with emphasis on methods of specifying, calculating, dimensions, and delineating. Prerequisite: T-DFT 103.

T-DFT 204 Descriptive Geometry

4

Graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems will be stressed with analytical verification where applicable. Visualization shall be stressed on every problem.

Prerequisites: T-DFT 102, T-MAT 102.

T-DFT 205 Design Drafting I

Λ

Basic design is introduced in the study of motion transfer mechanisms as they relate to power trains. Principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings and simplified drafting practices constitute areas of study. Types and methods of specifying materials and workmanship are an integral part of the course.

Prerequisites: T-DFT 204, T-MAT 102, T-PHY 102.

T-DFT 206 Design Drafting II

Λ

Research to solve a problem in design by consulting various manuals, periodicals, and through laboratry experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly and sub-assembly drawings, pictorial drawings, exploded pictorial assembly, patent drawings and specifications are required as a part of the problem.

Prerequisites: T-DFT 205, T-DFT 210.

T-DFT 211 Mechanisms

4

Mathematical and drafting room solutions of problems involving the principles of machine elements. Study of motions of linkages, velocities and acceleration of points within a link mechanism; layout methods for designing cams, belts, pulleys, gears and gear trains.

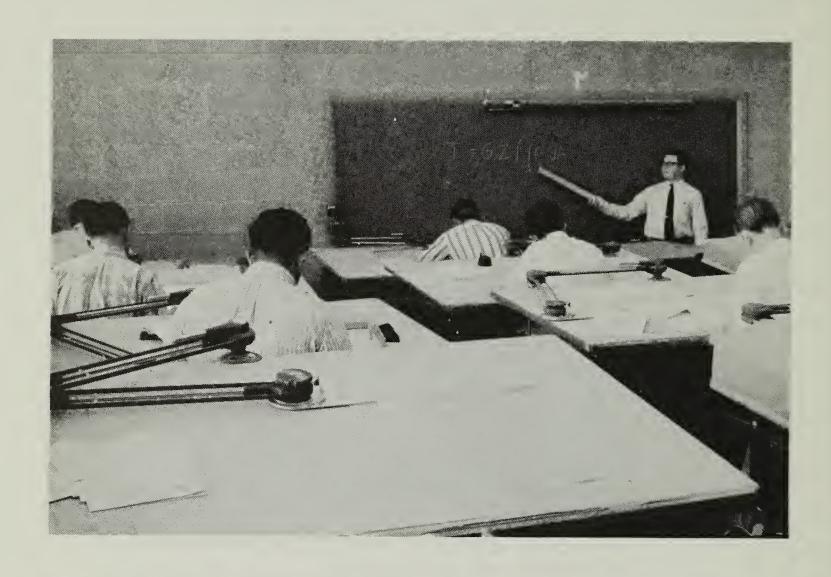
Prerequisites: T-DFT 201 & 204, T-MAT 103, T-PHY 106.

T-DFT 212 Jig and Fixture Design

4

Commercial standards, principles, practices and tools of jig and fixture design. Individual project and design work to acquaint students with the types of jigs and fixtures and their design.

Prerequisites: T-DFT 205, T-DFT 211.





DFT 1101

Schematics and Diagrams: Power Mechanics

1

Interpretation and reading of schematics and diagrams. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes.

Prerequisite: None.

ECONOMICS

Quarter Hours Credit

T-ECO 102

Economics

redit

The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large.

Prerequisite: None.

T-ECO 104

Economics

3

Greater depth in principles of economics, including a penetration into the composition and pricing of national output, distribution of income, international trade and finance, and current economic problems.

Prerequisite: T-ECO 102.

T-ECO 108

Consumer Economics

3

Designed to help the student use his resources of time, energy, and money to get the most out of life. It gives the student an opportunity to build useful skills in buying, managing his finances, increasing his resources, and to understand better the economy in which he lives.

Prerequisite: None.

ELECTRICITY

Quarter Hours Credit

T-ELC 101

Fundamentals of Electricity

Elementary principles of electricity including: basic electric units, Ohm's law, Kirchhoff's law, network theorems, magnetics, basic electrical measuring instruments, inductance, capacitance, sine wave analysis, and non-resonant resistive, inductive and capacitive networks.

Prerequisite: None.

T-ELC 102

Fundamentals of Electricity

G

Series and parallel resonant-circuit analysis, resonant and non-resonant transformer analysis, basic diode power supply analysis, introduction to non-linear resistive control devices, and introduction to electro-mechanical devices.

Prerequisite: T-ELC 101.

T-ELC 201

Electrical Machinery

3

A course in the basic understanding and application of electricity to modern industrial machinery. Included is a study of direct current motors, motor controls and protecting devices, transformers, and the industrial applications of this equipment.

Prerequisite: T-PHY 103.

T-ELC 210

Rotating Devices

3

Introduction to electrical machinery. AC and DC motor and generator principles, synchros and servomechanisms, alternators and dynamotors, Ward-Leonard and amplidyne control systems will be analyzed. A general knowledge of the theory, operation, and maintenance of these devices and systems will be stressed.

Prerequisites: T-ELC 102, T-PHY 102.

ELC 1110G

Electric Linemen

9

This course is designed to introduce the beginning student to the overall vocation of Electric Linemen and covers such things as organization, administration responsibilities, methods and general procedures expected of a lineman.

ELC 1112G

First Aid For Linemen

1

This course is designed to give the student a basic understanding of (1) Accident Prevention, (2) Methods of Artificial Respiration, (3) Controlling Bleeding, and (4) Transportation.

ELC 1120G

Electric Line Construction

9

The many types of pole line construction and maintenance are covered in this course. The student will be active in constructing various types of lines as well as actually maintaining them under actual simulated field conditions.

ELC 1122G

Transformers, Relays, Capacitors and Sectionalizers

This course is designed to acquaint the student with the various purposes and uses of the transformers, circuit relays, sectionalizers and capacitors.

ELC 1124G

Electrical Generation and Transmissions

3

This course is designed to give the student a thorough understanding of the transformation of an electromotive force to electricity to develop within the student an understanding of electricity, from the generating plant to the consumer.





ELECTRONICS

Quarter Hours Credit

T-ELN 101 Electronic Instruments and Measurements

n

A study of basic electronic instruments, their theory of operation, function, tolerances, and calibration. Both service and laboratory instruments will be studied. Laboratory experience will provide application of each type instrument studied.

Prerequisite: T-ELC 102.

T-ELN 105 Control Devices

7

A study in depth of the electrical characteristics of vacuum tubes and transistors. Basic parameters and applications of each type device to the three configurations of a three terminal two port system will be included.

Prerequisite: T-ELC 102.

T-ELN 201 Industrial Controls

Δ

Industrial controls is the study of modern methods of controlling machinery by electronic circuitry. Machinery controls and electronic mechanisms that automatically operate machines will be studied. Types of motors, generators, control signals and devices, thyratrons, gates, switches, and servomechanism circuits are major areas of study.

Prerequisite: T-PHY 103.

T-ELN 205

Applications of Vacuum Tubes and Transistors

7

Practical applications of vacuum tubes and transistors to basic audio amplifiers, radio frequency amplifiers, detectors, modulators and oscillators.

Prerequisite: T-ELN 105.

T-ELN 210

Semiconductor Circuit Analysis

6

A study in some depth of the analysis and design of transistor circuits. Network theorems and equivalent circuits are used extensively in evaluating total circuit performance. Device peculiarities and limitations pertinent to reliable operations are considered. H. Y. Z. and T. parameters are employed as well as signal-flow graphs. Prerequisite: T-ELN 105.

T-ELN 214

Wave Shaping and Pulse Circuits

3

Broadband amplifiers, magnetic amplifiers, multivibrators, wave shaping techniques, chopper amplifiers, clipper and clamper circuits.

Prerequisites: T-ELN 105, T-MAT 103.

T-ELN 215

Wave Shaping and Pulse Circuits

3

Pulse techniques, diode switches, gates, step-counters,

restorers and other specific circuits which function as switches.

Prerequisite: T-ELN 214.

T-ELN 220 Electronic Systems

7

A block diagram course investigating numerous electronic systems. Modules or blocks of various circuits already studied are arranged in various manners to produce complex electronic systems. Systems will be explained and reduced to functions and then to block diagrams. AM, FM, and Single Sideband transmitters and receivers, multiplexing, TV transmitters and receivers, pulse-modulated systems, computers, telemetry, navigational systems, sonar and radar will be considered.

Corequisite: T-ELN 215.

T-ELN 225 Transmission and Propagation

3

An introduction to the electromagnetic radiation, principles of antenna, radiation patterns and field strength. The characteristics and use of transmission lines in radio frequency application. Factors involved in propagation, ground waves, reflections, sky waves, atmospheric effects, ionosphere, fading, noise, static, wire radiators, directive gain, effect of ground, impedence, antenna systems and arrays.

Prerequisite: T-ELN 105. Corequisite: T-ELN 205.

T-ELN 227 UHF and Microwave Systems

7

A study of UHF and VHF components, circuits, and measurement techniques. The use of distributed constant elements, waveguides and coaxial cables, microwave links, high frequency oscillators, magnetrons, klystrons, traveling wave tubes. An introduction to the use of the Smith Chart.

Prerequisite: T-ELN 225.

T-ELN 230 Television Systems

7

A study of the principles of television including the television system, camera tubes, scanning and synchronization, composite video signal, receiver circuits, transmitting equipment, color television, and closed-loop systems.

Corequisite: T-ELN 214.

T-ELN 235 Industrial Instrumentation

7

Broad introduction to use of industrial electro-mechanical and electronic circuits and equipment. Provides an understanding of the methods, techniques, and skills required for installation, service and operation of a variety of industrial control systems. Analysis of sensing devices for detecting changes in pressure, temperature, humidity, sound, light, electricity, the associated circuitry and indicating and recording devices.

Prerequisites: T-ELN 205, T-PHY 104.

T-ELN 240 Digital Computers

An exploration into the methodology of counting and computing. Various computer techniques will be investigated including: non-sinusoidal waveforms, binary and decade counters, industrial counters, readout devices, logic circuits, arithmetic circuits, storage devices, input-output devices, computer control, analog and digital converters. Prerequisite: T-ELN 214.

T-ELN 245 Electronic Design Project

2

Students are required to design and construct a project approved by the instructor. Includes selection of project, design, construction, and testing of completed project. Projects may include: AM or FM transmitters or receivers, amplifiers, test equipment, control devices, simple counters, lasers, masers, etc.

Prerequisite: T-ELN 205.

ENGLISH

Quarter Hours Credit

T-ENG 101 Grammar

ream

Designed to aid the student in the improvement of self-expression in grammar. The approach is functional with emphasis on grammar, diction, sentence structure, punctuation, and spelling. Intended to stimulate students in applying the basic principles of English grammar in their day-to-day situations in industry and social life. Prerequisite: None.

T-ENG 102 Composition

3

Designed to aid the student in the improvement of self-expression in business and technical composition. Emphasis is on the sentence, paragraph, and whole composition. Prerequisite: T-ENG 101.

T-ENG 103 Report Writing

3

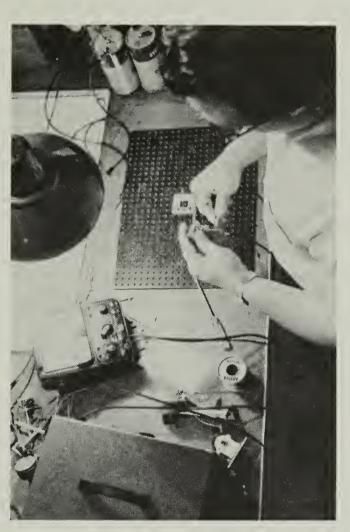
The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices, are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum.

Prerequisite: T-ENG 102.

T-ENG 204 Oral Communication

3

A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular tech-









niques of theory to correct speaking habits and to produce effective oral presentation. Particular attention given to conducting meetings, conferences, and interviews. Prerequisite: T-ENG 101.

T-ENG 206 Business Communication

3

Develops skills in techniques in writing business communications. Emphasis is placed on writing action-getting sales letters and prospectuses; business reports; summaries of business conferences; and letters involving credit, collection, adjustment, complaint, orders, acknowledgment, remittances, and inquiry.

Prerequisite: T-ENG 102.

ENG 1101 Reading Improvement

2

Designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition, and to train for comprehension in larger units.

Prerequisite: None.

ENG 1102 Communication Skills

3

Designed to promote effective communication through correct language usage in speaking and writing. Prerequisite: ENG 1101.

ENG 1103 Report Writing

2

Fundamentals of correct language usage applied to report writing. Emphasis is on principles of report construction and application to various report forms.

Prerequisite: ENG 1102.

FORESTRY

Quarter Hours Credit

T-FOR 101 General Forestry

2

An introduction to forests and forestry. The relationships of the forest and its use to the welfare of mankind is stressed. The student is given insight into the several branches of forestry through lecture, demonstrations and visual aids.

Prerequisite: None.

T-FOR 102 Forest Botany and Ecology

6

Basic botany oriented to forest vegetation. An investigation into the internal and external structure of plants and trees and the basic function of the various parts of trees. Basic plant classification is introduced.

Includes a study of the members of the forest community.

Includes a study of the members of the forest community. The relations of the forest to its environment, the effect

of trees on each other, on other vegetation, and the use of ecology.

Prerequisite: None.

T-FOR 103 Safety and Woodsmanship

1

Living and working in forested areas. The selection of clothing and personal equipment. Foot and vehicular movement in the forest including travel on hazardous terrain and under severe conditions is stressed. Survival under adverse conditions. Search and rescue operations are demonstrated and practiced.

Prerequisite: None.

T-FOR 104 Forest Tree Measurements

4

The course is designed to familiarize the student with the various measurements made in forestry. Skills are developed in the techniques of measuring standing and felled trees as well as other products of forest lands. Emphasis is given to quality as well as quantity.

Prerequisite: T-FOR 101.

T-FOR 105 Forest Soils

3

An introduction to basic soils as applied to forests. Principles of soil conservation and forest soil reclamation: forest soil management and the effects of soil conditions on forest growth.

Prerequisite: None.

T-FOR 107 Tree Identification

3

Taxonomy of woody plants: their field identification; the geographic distribution of the important forest trees of the United States.

Prerequisite: None.

T-FOR 109 Applied Silviculture

5

Deals with the technical details of tree crop production; the theory and practice of controlling forest establishment, composition and growth. An applied science. Prerequisite: T-FOR 102.

T-FOR 206 Timber Cruising

5

Measuring the resources of the forest as to quantity and quality. Emphasis is on the entire forest tract or a portion thereof rather than the individual tree. The use of cruising systems and ocular estimates are covered.

Prerequisite: T-FOR 104.

T-FOR 208 Forest Surveying

3

Relocation of old corners and lines and the legal aspects of land surveys. Forest road layout.

Prerequisite: T-CIV 101.











T-FOR 210 Logging

4

Planning and cost control, logging production, labor, hand tools, cutting, land transport, water transport, wood storage.

Prerequisite: None.

T-FOR 212

Forest Aerial Photography Interpretation

3

Science of use of aerial photographs in forestry, obtaining and handling aerial photos, photo specifications, stereoscopy, measuring aerial photographs, stand classification from photographs, combining aerial and ground survey.

Prerequisites: T-DFT 101, T-DFT 120.

T-FOR 214

Forest Improvements

3

An introduction to man-made structures and improvements in the forests. Materials, structures, roads, tools, methods, and plans are covered. Contract operations and internal operations are compared.

Prerequisite: None.

T-FOR 215

Forest Insects and Diseases

3

The study of the primary forest insects and diseases and control methods. Includes field identification of certain insects and diseases.

Prerequisite: T-FOR 101.

T-FOR 216

Forest Equipment

,

The selection, maintenance, and use of equipment for forest land management, such as heavy logging, firefighting, land preparation equipment and vehicles. Radio networks and operations and the trend to mechanization are included.

Prerequisite: None.

T-FOR 217

Forest Fire Control

3

A study of the main causes of forest fire, preventative measures, and methods of controlling forest fires. Includes field exercise with modern forest fire equipment.

Prerequisite: None.

T-FOR 218

Forest Field Seminar

4

An extended field laboratory where the student visits operating forest product industries and land management organizations.

T-FOR 219

Forest Recreation

3

Principles and problems involved in the utilization of our natural resources for recreational purposes.

Prerequisite: None.

T-FOR 220 Project Supervision in Forestry

3

Supervisory techniques and elements of project layout.

T-FOR 222

Forestry Genetics Field Work

2

Selection of superior tree candidates, grafting, orchard establishment and culture, scion and seed collection.

INDUSTRIAL SCIENCE

Quarter **Hours Credit**

T-ISC 201

Industrial Organization and Management

Organizational structure for industrial management; operational and financial activities, including accounting, budgeting, banking, credit and industrial risk, forecasting of markets, selection and layout of physical facilities; selection, training and supervision of personnel as found in typical industrial organizations.

Prerequisite: None.

MATHEMATICS

Quarter **Hours Credit**

T-MAT 101

Technical Mathematics

The real number system is developed as an extension of natural numbers. Number systems of various bases are introduced. Fundamental algebraic operations, the rectangular coordinate system, as well as fundamental trigonometric concepts and operations are introduced. The application of these principles to practical problems is stressed.

Prerequisite: Satisfactory evidence that admission requirements have been met.

T-MAT 102

Technical Mathematics

5

A continuation of T-MAT 101. Advanced algebraic and trigonometric topics including quadratics, logarithms, determinants, progressions, the binominal expansion, complex numbers, solution of oblique triangles and graphs of the trigonometric functions are studied in depth.

Prerequisite: T-MAT 101.

T-MAT 103

Technical Mathematics

5

The fundamental concepts of analytical geometry, differential and integral calculus are introduced. Topics included are graphing techniques, geometric and algebraic interpretation of the derivative, differentials, rate of change, the integral and basic integration techniques. Applications of these concepts to practical situations are stressed.

Prerequisite: T-MAT 102.

Business Mathematics T-MAT 110

This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, and pertinent uses of mathematics in the field of business.

Prerequisite: None.

Technical Mathematics T-MAT 201

5

5

A continuation of T-MAT 103. More advanced concepts of differentiation and integration are considered. Included are graphs and derivatives of the trigonometric functions, exponential and logarithmic differentiation and integration, advanced integration techniques, polar equations, parametric equations, and Fourier series.

Prerequisite: T-MAT 103.

T-MAT 208 Calculus and Laplace Transforms for Electronics

An investigation of the methods of calculus which are of the most direct use in the study of electronic circuits. Introduction to selected topics from differential equations and Laplace transforms and applications of these methods to the solution of electronic circuit problems.

Prerequisite: T-MAT 201. Corequisite: T-ELN 214.

MAT 1101 Fundamentals of Mathematics

5

5

Practical number theory. Analysis of basic operations: addition, subtraction, multiplication and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.

Prerequisite: None.

MAT 1114G Related Mathematics

This course is designed to equip the student with a knowledge of figuring distances, loads, ratios, and weights.

MECHANICS

Quarter **Hours Credit**

T-MEC 101 Machine Processes

An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes of our modern industry. It will include a study of measuring instruments, characteristics of metals and cutting tools. The student will become familiar with the lathe family of machine tools by performing selected operations such as turning, facing, threading, drilling, boring, and reaming.

Prerequisite: None.

Machine Processes **T-MEC 102**

Advanced operations on lathe, drilling, boring and reaming machines. Milling machine theory and practice. Thorough study of the types of milling machines, cutters, jig and fixture devices, and the accessories used in a modern industrial plant. Safety in the operational shop is stressed.

Prerequisite: T-MEC 101.

T-MEC 110 Fundamental Mechanisms

4

2

A study of the purpose and actions of cams, cables, gear trains, differentials, screws, belts, pulleys, shafts, levers, and other mechanical devices used to transmit or control signals.

Prerequisite: T-PHY 102.

T-MEC 205 Strength of Materials

Study of principles and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying and dynamic. Analyses of these stresses are made as applied to thin-walled cylinders and spheres, riveted and welded joints, beams, columns and machine components.

Prerequisites: T-PHY 106, T-MAT 103.

T-MEC 210 Physical Metallurgy

4

Introductory course in metallurgy, a basic study of the properties of metals and alloys. Analysis of the structure of metals and alloys, atomic structure, nuclear structure, and nuclear reactions. Solid (crystalline) structures, methods of designating crystal planes; liquid and vapor phases; phase diagrams; and alloy systems.

Prerequisite: T-PHY 101.

T-MEC 211 Physical Metallurgy

Properties of metals and alloys, the reactions of metals, diffusion, carburizing, metal bonding and homogenization; recrystallization and grain growth, age hardening, nitriding, internal oxidation; heat treatment of steel; laboratory experiments and demonstrations.

Prerequisite: T-MEC 210.

T-MEC 235 Hydraulics and Pneumatics

The basic theories of hydraulic and pneumatic systems. Combinations of systems in various circuits. Basic designs and functions of circuits and motors, controls, electro-hydraulic servomechanisms, plumbing, filtration, accumulators and reservoirs.

Prerequisite: T-PHY 102.

T-MEC 237 Control Systems

Hydraulic, pneumatic, mechanical, electrical and electronic control systems and components. Basic description, analysis and explanation of operation. Typical performance characteristics, limitations on performance, accuracy, applications and their utilization in industrial processes.

Prerequisites: T-PHY 103, T-PHY 205.

NURSING

Quarter Hours Credit

NUR 1110G

Vocational: Adjustments I

A study of the principles of good personal and vocational behavior of the Practical Nursing student to enable her to work with ease and intelligence with the doctor, professional nurse, patient and allied hospital employees. To stimulate interest of the student in public relations acceptable to health of the community.

NUR 1111G

Health

4

An introduction to the study of personal, physical, and mental health as it relates to the family and community.

NUR 1112G

Basic Science

5

The course consists of a study of the skeletal structure, muscular construction and location, basic neural paths, functional body organs, glands and the corporate functions of the total human body, including nutirition and bacteriology.

NUR 1113G

Nursing I

11

A course designed to teach the Practical Nursing student the skills and principles needed in the nursing care of the patient. Emphasis is placed on meeting the psychological needs of the patient while performing bedside care and treatments.

NUR 1120G

Common Drugs

3

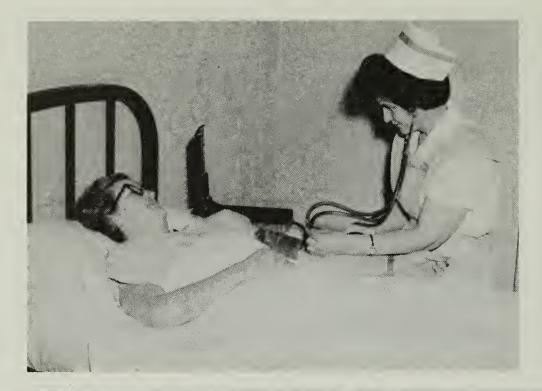
A course supplying general information about which the practical nurse will need while preparing and administering them. There is a brief hint at historical background. The sources of drugs, some aspects of drug therapy and some types of drug preparation are discussed. Also included are factors which determine the effects of drugs on the body, channels through which drugs are given for the most desirable effect and the weight and measure tables needed for accurate measurements. Safety precautions are stressed throughout the course.

NUR 1121G

Nursing Skills II

4

A continuation of NUR 1113G giving a deeper and broader understanding of necessary principles to meet the needs of the more seriously ill, long term or the dying patients. Basic nursing care is presented in relation to general patient condition and not according to specific illnesses.







NUR 1122G

Introduction to Medical-Surgical Nursing

6

A course planned to help the student develop understandings and skills necessary to meet the basic fundamental needs of patients with selected medical-surgical conditions, including an introduction to resources available for the patient and his family in the hospital and the community.

NUR 1123G

Introduction to Obstetrical Nursing

3

A course of study presenting all aspects of normal pregnancy, labor and the puerperium and some of the complications. It emphasizes the newer concepts of maternity nursing and stresses basic principles rather than specific procedures. Clinical experience provides opportunity for the student to develop an understanding of the basic principles of maternity nursing, so that she may become more aware of her responsibilities to the patient.

NUR 1124G

Introduction to Pediatric Nursing

3

A course of study concerned with meeting the health needs of children in various stages of growth and development. Periods of clinical experience are provided for students to increase understandings and improve skills in child care. Basic principles of communicable diseases fundamental to nursing responsibility for individuals, family and the community is also included.

NUR 1130G

Medical-Surgical Nursing

8

A continuation of NUR 1122G based on the classroom study and clinical experience centered around the more common medical-surgical conditions. It includes preventive, rehabilitative and public health aspects.

NUR 1131G

Maternal Nursing

4

A continuation of Nursing 1123G. A further study of human reproduction specifically as it deals with the female role in conception, pregnancy, labor and the postpartum period.

NUR 1132G

Pediatric Nursing

5

A course that deals with the care of the sick child including prematures outside of the nursery, infectious diseases, treatment and nursing care.

NUR 1140G

Medical-Surgical Nursing

13

A continuation of NUR 1130G. It includes conferences and guided learning experiences using concepts developed in NUR 1130G and NUR 1122G to formulate and execute nursing care plans which help the patient and family solve problems arising from these conditions.

NUR 1141G

Vocational Adjustments II

3

A discussion of the legal and ethical responsibilities of the Licensed Practical Nurse. Opportunity is provided for the practical nurse to better understand the functions of the practical nurse associations and the value she receives from active participation in these.

NUR 1142G

Maternal Nursing

2

This period of the training deals with actual Nursing Care experience in the Obstetrical, Nursery and Pediatric areas of the hospital.

PHYSICS

Quarter **Hours Credit**

T-PHY 101

Physics: Properties of Matter

A fundamental course covering several basic principles of physics. The divisions included are solids and their characteristics, liquids at rest and in motion, gas laws and applications. Laboratory experiments and specialized problems dealing with these topics are part of this course. Prerequisite: None.

T-PHY 102

Physics: Work, Energy, Power

Major areas covered in this course are work, energy, and power. Instruction includes such topics as statics, forces, center of gravity and dynamics. Units of measurement and their applications are a vital part of this course. A practical approach is used in teaching students the use of essential mathematical formulas.

Prerequisites: T-MAT 101, T-PHY 101.

T-PHY 103

Physics: Electricity

Basic theories of electricity, types of electricity, methods of production, and transmission and transforming of electricity. Electron theory, electricity by chemical action, electricity by friction, electricity by magnetism, induction voltage, amperage, resistance, horsepower, wattage, and transformers are major parts of the course.

Prerequisites: T-PHY 101, T-MAT 101.

T-PHY 104

Physics: Light and Sound

A survey of the concepts involving wave motion leads to a study of sound, its generation, transmission and detection. The principles of wave motion also serve as an introduction to a study of light, illumination and the principles involved in optical instruments. Application is stressed throughout.

Prerequisites: T-MAT 101, T-PHY 101.

T-PHY 106

Applied Mechanics

5

Concepts and principles of statics and dynamics. Parallel concurrent and noncurrent force systems in coplanar and





noncoplanar situations. Concepts of centroids and center of gravity, moments of inertia, fundamentals of kinetics, and kinematics of velocity and motion.

Prerequisites: T-MAT 103, T-PHY 102.

PHY 1101 Applied Science

4

An introduction to physical principles and their application in industry. Topics in this course include measurement; properties of solids, liquids, and gases; basic electrical principles.

Prerequisite: None.

PHY 1102 Applied Science

4

The second in a series of two courses of applied physical principles. Topics introduced in this course are heat and thermometry, and principles of force, motion, work, energy, and power.

Prerequisite: PHY 1101.

PHY 1194G Physics of Matter

3

This course is designed to acquaint the student with the applications of equipment and apparatuses; also their reactions to electric energy.

POLITICAL SCIENCE

Quarter

T-POL 201

United States Government

Hours Credit

A study of government with emphasis on basic concepts, structure, powers, procedures and problems. Prerequisite: None.

POWER MECHANICS

Quarter **Hours Credit**

PME 1101

Internal Combustion Engines

Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems; proper lubrication; and methods of testing, diagnosing and repairing.

Prerequisite: None.

PME 1102

Engine Electrical and Fuel Systems

9

A thorough study of the electrical and fuel systems of the automobile. Battery cranking mechanism, generator, ignition, accessories and wiring; fuel pumps, carburetors, and fuel injectors. Characteristics of fuels, types of fuel systems, special tools, and testing equipment for the fuel and electrical system.

Prerequisite: PME 1101.

PME 1113

Farm Machinery Hydraulic Systems

6

A concentrated investigation of tractor hydraulic systems consisting of hydraulic principles and components of various hydraulic systems. Hydrostatics, basic circuits, fluids, hydrodynamics and automatic draft control. Identification of trouble, servicing, and repair.

Prerequisite: PME 1101.

PME 1114

Farm Machinery Power Trains

6

Principles and functions of tractor power train systems: clutches, bearings, shafts, and cases, gears and gear trains, differentials, final drives, and planetary systems. Prerequisite: PME 1101.

PME 1115

Farm Machinery Suspensions and Implements

6

Principles and functions of the components of tractor suspensions. Practical instruction in adjustment and repair of suspension, steering, braking, and hitching systems. Assembly, adjustment, operation, maintenance and repair of tractor-drawn and mounted equipment. Students will receive instruction in principles of operation and diagnosis and correction of troubles in tillage, planting and seeding, pest control and harvesting equipment.

Prerequisite: PME 1101.

PME 1116

Farm Machinery Service and Repair

6

Opportunity for the student to practice principles and techniques learned in previous courses by means of service and repair work that can be made available. A close simulation to an actual farm machinery shop situation will be maintained, and effort will be made to give the student a full range of testing and servicing experience under both shop and field conditions.

Prerequisite: PME 1101.

PSYCHIATRIC NURSE'S AIDE

Quarter Hours Credit

PNA 1110G

Introduction To Health Services

1

Introduces the student to modern concepts of health; to agencies responsible for health protection, care of the sick, and rehabilitation; and to the role of the attendant within the hospital organization and as a member of the nursing team.

PNA 1120G

Meeting Daily Physical Needs of Patients

1

Introduces the student to basic principles and specific procedures for carrying out nursing measures related to the patient's general cleanliness, grooming, oral hygiene, nutrition, sleep and rest, activity and elimination. Emphasis is given to the importance of the patient's environment, safety principles, and the role of the attendant in making observations of patients while meeting these physical needs.

PNA 1130G

Assisting With Problems Related To Patient's Need 1

Introduces the student to common problems related to daily physical needs of patients and the nursing measures for prevention and/or correction of such problems. Emphasis is on the basic principles underlying nursing techniques, specific procedures, and observing and reporting. Each student will have the opportunity to practice common procedures under supervision of the teacher as opportunities arise in the clinical area. The student will be encouraged to think in terms of prevention and correction of problems.

PNA 1140G

Nursing Procedures

2

1

Introduces the student to aseptic techniques and specific nursing procedures related to therapeutics, maintaining patient records, observation of patient's condition, and carrying out of hospital policies in specific situations. Following classroom discussion of each procedure, students will have opportunities for practice in the classroom and/or clinical area as opportunities for practice in the classroom arise. Emphasis will be given to related principles of technique related to each procedure studied.

PNA 1150G

Procedures Related To Change in Patient Placement

Introduces the student to the procedures and hospital policies related to admission of patients, discharge of patients, absence from the hospital without permission, absence for home visitation, and transfer of patients from one hospital area to another. Emphasis is on responsibilities of the attendant in each situation, record-keeping required for each situation and possible effects of changing status on the patient.

PNA 1160G

Meeting Mental and Emotional Needs of Patients

Introduces the student to some of the fundamentals of human behavior, common problems of adjustment, the adjustment mechanisms, and applications of knowledge of human behavior to personal living and to care of patients.

PNA 1170G

Nursing Care of Psychiatric Patients

3

2

Introduces the student to common psychiatric conditions, to therapeutic principles, and to the role of the attendant in care of patients with various manifestations of mental or emotional illness.

PNA 1180G

Becoming A Hospital Employee

1

Promotes further understanding of the role of the aide, hospital policies and procedures, job relationships, procedures for applying for or resigning from a position, role of the attendant in the community, and various aspects of financial responsibility, especially in relation to taxation, and social security.

PSYCHOLOGY

Quarter Hours Credit

T-PSY 112

Personality Development

Designed to help the student recognize the importance of the physical, intellectual, social, and emotional dimensions of personality. Emphasis is placed on grooming and methods of personality improvement.

Prerequisite: None.

T-PSY 206

Applied Psychology

3

A study of the principles of psychology that will be of assistance in the understanding of inter-personal relations on the job. Motivation, feelings, and emotions are considered with particular reference to on-the-job problems. Other topics investigated are: employee selection, supervision, job satisfaction, and industrial conflicts. Attention is also given to personal and group dynamics so that the student may learn to apply the principles of mental hygiene to his adjustment problems as a worker and a member of the general community.

Prerequisite: None.

T-PSY 240G

Applied Psychology

3

Principles of psychology as they relate to the problems of human behavior and adjustments. Emphasis is placed on growth and development, emotions, learning, memory, motivations, personality and mental hygiene.

T-PSY 250G

Educational Psychology

3

Inherited tendencies, laws of learning, laws of teaching, habit formation, individual differences, formation of correct ideals and attributes.

PSY 1101

Human Relations

5

A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation.

Prerequisite: None.

PSY 1118G

Human Relations

2

This course is concerned with the principles of interpersonal relationships and considers the areas of human motivation, feelings, emotions and learning. The course is taught with special emphasis on the practical on-the-job situations, as they relate to personal and group dynamics.

SOCIAL SCIENCE

Quarter Hours Credit

T-SSC 201 Social Science

An integrated course in the social sciences, drawing from the fields of anthropology, psychology, history, and sociology.

Prerequisite: None.

T-SSC 202 Social Science 3

A further study of social sciences with emphasis on economics, political science, and social problems as they relate to the individual. Prerequisite: T-SSC 201.

T-SSC 205 American Institutions 3

A study of the effect of American social, economic, and political institutions upon the individual as a citizen and as a worker. The course dwells upon current local, national, and global problems viewed in the light of our political and economic heritage. Prerequisite: None.

SOCIOLOGY

Quarter Hours Credit

T-SOC 207 Rural Society

> A study of selected elements of rural sociology with emphasis on current social changes. The course provides a sociological background for the understanding of rural social changes. Areas of study include rural culture, group relationships, social classes, rural and suburban communities, farm organizations, the communication of agricultural technology, rural social problems, agricultural adjustment and population change. Prerequisite: None.

WELDING

Quarter Hours Credit

WLD 1101

Basic Gas Welding

Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding; bronze welding, silver soldering, and flame-cutting methods applicable to mechanical repair work.

Prerequisite: None.

WLD 1102 Basic Arc Welding

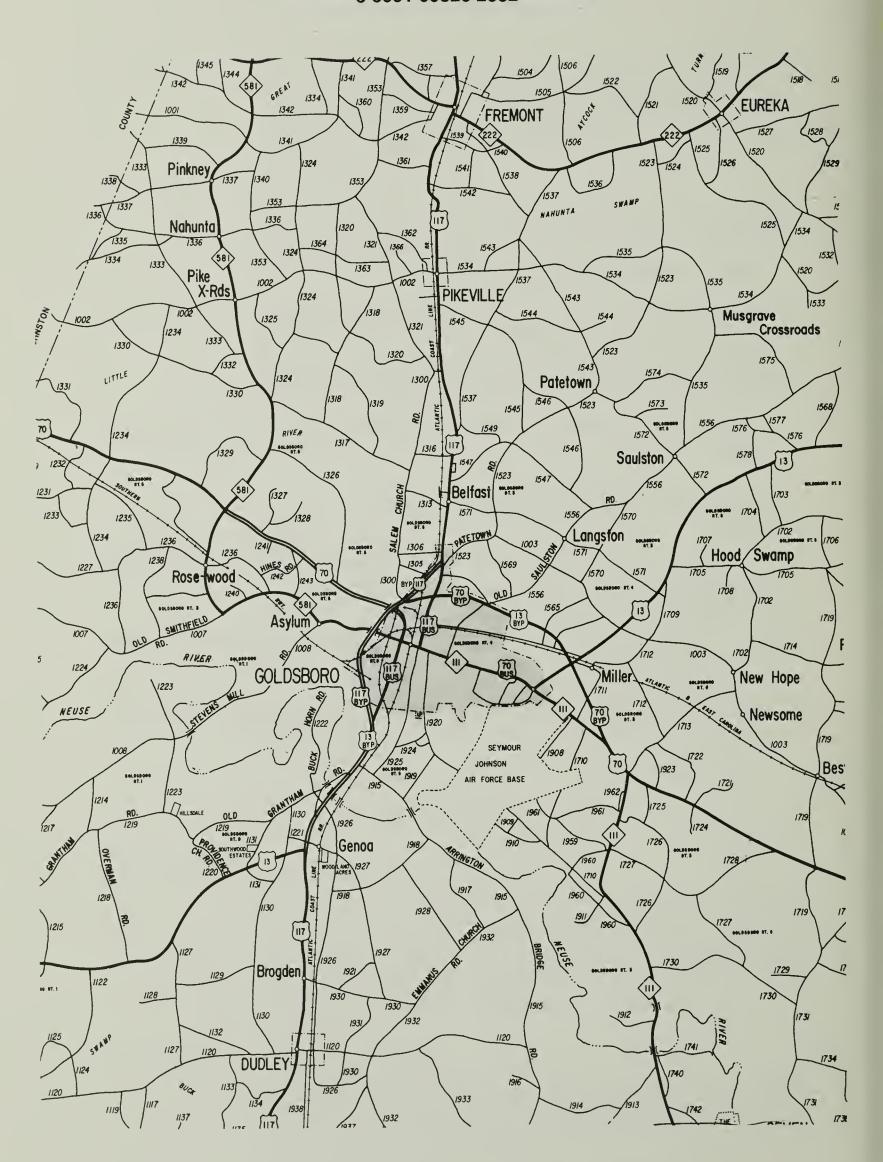
1

Welding demonstrations by the instructor and practice by students in the use of the arc welding process to fabricate steel. Welded joints are discussed and welded in various positions. Care and maintenance of the arc welder are applied in this course.

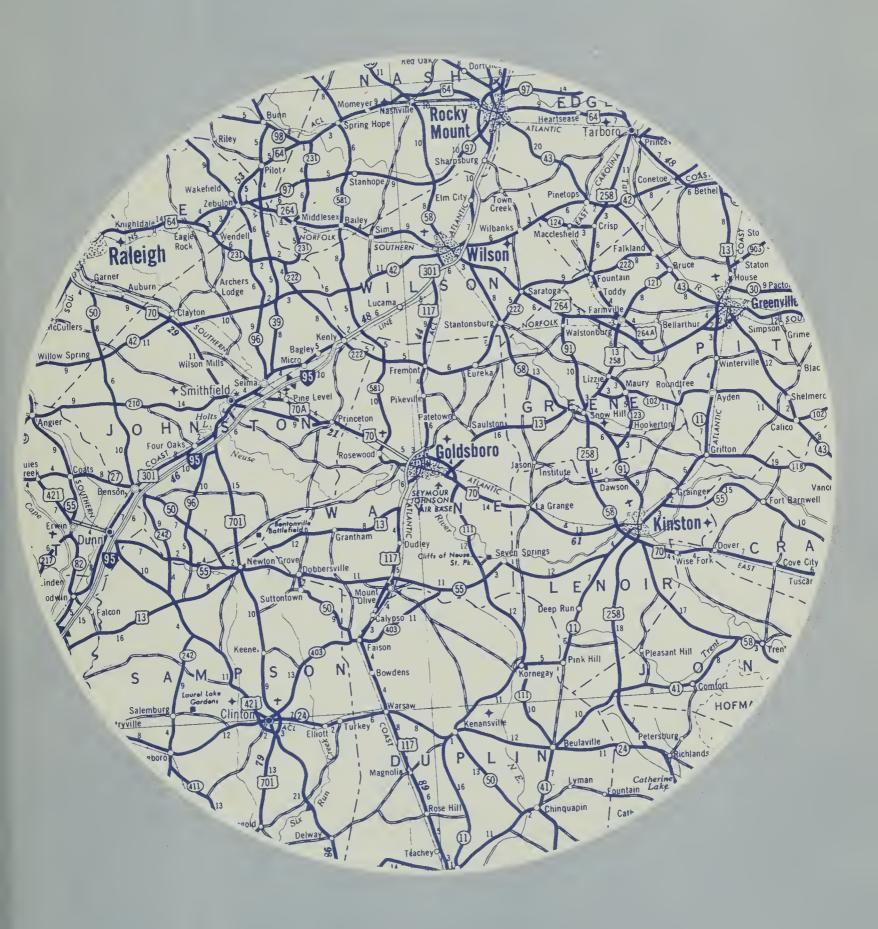
Prerequisite: None.

WAYNE TECHNICAL INSTITUTE POST OFFICE BOX 1259 GOLDSBORO, NORTH CAROLINA

Dear Sir,
I have studied your catalog and I
Am sending you my application in this letter
Would like to meet with one of your counselors
─ Would like to take the Wayne Technical Institute placement tests.
Would like to visit WTI on (Day) (Date) at
(Time) venient.
(Note: The office is not open on Saturday or Sunday—special appointments can be arranged.)
Please send information concerning rooms for students in Goldsboro.
MY NAME IS:
Address:
City:
High School:
County State State
I am interested in studying,



50 Mile Radius of Goldsboro



WAYNE TECHNICAL INSTITUTE
P. O. Box 1259
Goldsboro, North Carolina 27530

BULK RATE
U. S. Postage
PAID

Goldsboro, N. C. Permit No. 142